The American Neptune

THE AMERICAN NEPTUNE

A QUARTERLY JOURNAL OF MARITIME HISTORY

1950
Volume X

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SALEM, MASSACHUSETTS

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THE AMERICAN NEPTUNE

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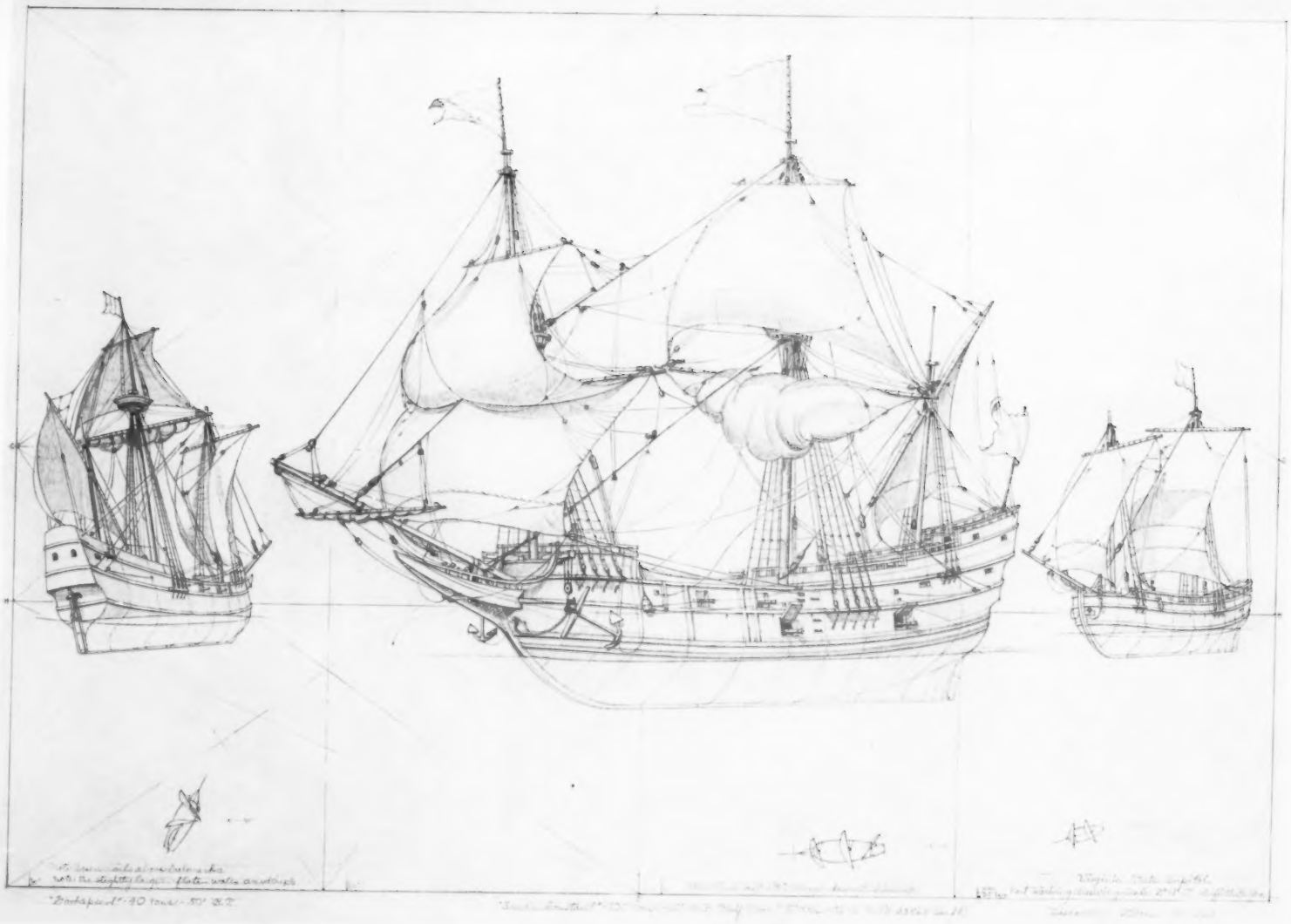
IT *is singularly exasperating that there is so little authentic information in existence regarding the ships and boats that have figured in some of the most dramatic scenes of American history. Human nature seems to demand pictures of such episodes whether facts are available or not, and the landing of the Pilgrims at Plymouth has led to paintings and engravings that are no less absurd than Mrs. Hemans' too frequently quoted verses about breaking waves dashing high on a stern and rock-bound coast. It is equally exasperating when artists engaged in historical reconstruction insist upon evolving improbable craft out of their heads, in the manner of Emanuel Leutze's version of Washington crossing the Delaware.*

A pleasing contrast to this objectionable precedent is the method used by Commander Griffith Baily Coale, when engaged by the Virginia's First Settlers Commission to paint a picture of the arrival of the ships Susan Constant, Godspeed, *and* Discovery *off Jamestown in 1607. He had next to no authentic information about these particular vessels. There was even uncertainty about their exact names, let alone their appearance. Nevertheless, his painting, which now hangs in Thomas Jefferson's Capitol in Richmond, represents so skillful an attempt to introduce historical and archaeological accuracy into a work of art that the Editors of*

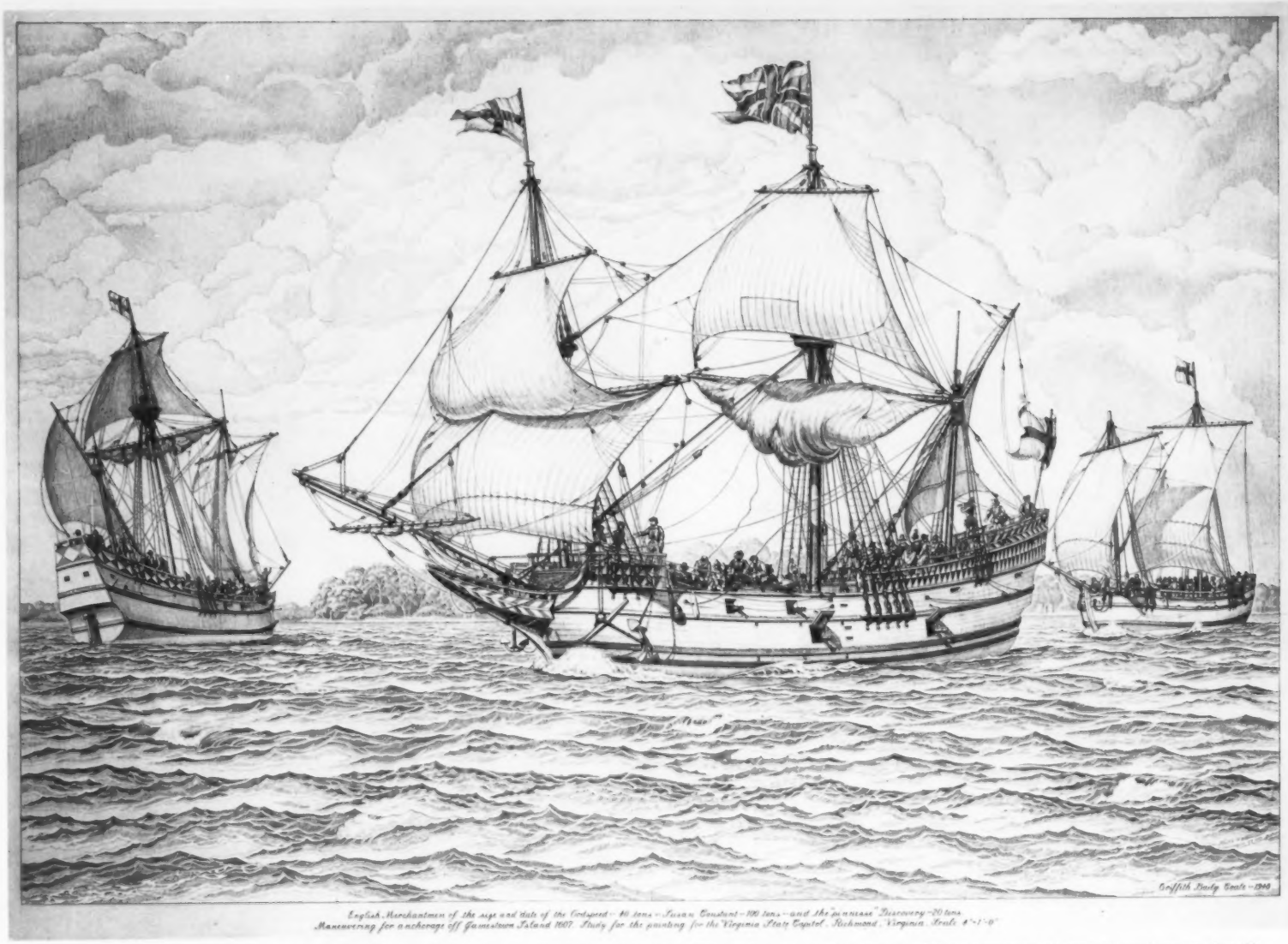
the NEPTUNE *are happy to be able to publish an account of its creation. Commander Coale is not only an able mural painter, but is also an experienced sailor and a conscientious delver into nautical archaeology. Consequently from the scanty authentic information about English ships of the early seventeenth century he derived all possible meaning, and proceeded to embody it in hard-pencil drawings of extraordinary detail before beginning to paint. It is appropriate that these drawings, which are remarkable works of art and research in themselves, have been acquired by The Mariners' Museum, Newport News, and so will be permanently available for study only a few miles from Jamestown. Commander Coale's article in the present issue describes the research and reasoning involved in the reconstruction of this important scene in our history, which sets a standard that is as worthy as it is difficult of emulation.*

Several pages in the Notes section are devoted to correspondence received during the autumn concerning Mr. Howard I. Chapelle's article in the July 1949 issue upon 'The Design of the American Frigates of the Revolution and Joshua Humphreys.' These include comments from Mr. Eugene S. Ferguson, with a reply from Mr. Chapelle, and an open letter addressed to the Editors by Mr. Clarkson A. Cranmer. The issues raised in these communications are of sufficient importance to warrant publication, but readers are reminded that space is at so great a premium, and the number of articles now awaiting publication is so large, that the discussion of controversial issues such as this cannot be continued indefinitely without prejudice to the general interest of the journal.



First pencil study of the three ships for the Virginia State Capitol painting. Showing form of hulls, proportion of masts, spars and sails to them, and the study of wind in plan and elevation. Scale—2" equals 1'-0" Size—17⅞" x 12⅜"

PLATE 1


English Merchantmen of the size and rate of the Godspeed — 40 tons — Susan Constant — 100 tons — and the pinnace Discovery — 20 tons
Maneuvering for anchorage off Jamestown Island 1607. Study for the painting for the Virginia State Capitol, Richmond, Virginia. Scale 4"=1'-0"
Griffith Bixby Scale — 1948

This pencil study is the complete development of the preliminary drawing. The ships are water borne. The elements observed and every detail depicted in proportion to the whole, for projection to the full size canvas. Scale—4" equals 1'-0" Size—36" x 25"

Arrival of the First Permanent English Settlers off Jamestown, Virginia, 13 May 1607

BY GRIFFITH BAILY COALE

THE oldest American Charter, drawn up under the authorization of James I of England, was finished on 10 April 1606. This royal charter made the plan of government of the Colony of Virginia the essence of simplicity. The King was Alpha and Omega. While Sir Walter Raleigh was in prison, his friend and admirer, Richard Hakluyt, and the brave sea captain, Bartholomew Gosnold, had become the heart of the enterprise. Gosnold having made the first direct voyage across the Western Ocean to the coast of New England, his burning ambition was to establish an English colony in the more southerly part of the Atlantic seaboard. Gosnold's and Hakluyt's enthusiastic backers of the venture were Sir Thomas Gates, Sir George Somers, Robert Hunt, Edward M. Wingfield and the famous chevalier, John Smith, who was to become the soul of the undertaking and the founder of Virginia.

At the end of the year 1606 all was in readiness. The little fleet consisted of three small vessels, which were undoubtedly not new. Without apparent difficulty 105 colonists were secured. Men of every rank they were, from George Percy, brother of the Earl of Northumberland, to Samuel Collier, 'boy.' More than half of the whole company were classed as 'gentlemen' who had no experience with manual labor. There were also 'Jewellers, gold refiners and a perfumer,' brave but not ideal men for a landing party to obtain a foothold on the beach, to fight the American wilderness. Even on the busy Thames the sailing of the three vessels created much interest. Perhaps a dramatist named William Shakespeare had possibly met Gosnold and Smith at the 'Globe' or 'Blackfriars,' in which he was a stockholder, or had been jostled with them as they talked in the rowdy Mermaid Tavern. Possibly Shakespeare was among the spectators who saw the clew-garnet blocks fall with the foot of the forecourses as the little 'sea-wagons' got underweigh. Prayers were offered up in the churches for the success of the venture, and the poet Drayton's third verse of his lyric reads:

This pencil study is depicted in proportion to the whole, for projection to the full size canvas.

And cheerfully at sea
Success you still entice
To get the pearls and gold,
And ours to hold
Virginia
Earth's only paradise.

They sailed from Blackwall, England, on 19 December 1606, and were held in the channel for some weeks by contrary winds. Many of the 'gentlemen' must have been desperately seasick as the bluff bows of the little tubs rose and fell in the steep seas of the relentless channel. There could be no cooking in the open fireplace of the galley in a sea-way, and little or no light in the low between-decks where men had to stoop or crawl, in what must have been, with the hatches battened down, a foul and evil place. The largest ship had a cramped cuddy called the 'great cabin' running under the quarter deck right aft. Below the miniature poop deck were two compartments the size of lockers for master and mate. On deck the winter gales levelled stinging spray to bite the faces and hands and penetrate the clothing.

For some unexplained reason Captain Christopher Newport was in command, not Bartholomew Gosnold. They sailed the southern route by way of the Azores, managing to keep all three ships together, and arrived at the West Indies toward spring. There were storms inboard as well as outboard, and Smith was put in irons by the leaders, almost hanged in the West Indies and acquitted by the first American jury later at Jamestown.

They intended to found the colony on the old site of Roanoke Island, but a howling gale drove them to the northward to the mouth of the Chesapeake Bay where they anchored in the lee of Cape Henry. A flight of arrows from the tall grass discouraged a landing party in a ship's boat, but all hands were enchanted as they gazed at the low-lying shores, under a carpet of 'flowers of diverse colors' and the 'goodly trees' in full spring foliage. They made sail and crossed the 'Mother of Waters,' and as the gale was spent as they approached the western shore they named the place Point Comfort. The expedition landed a short way beyond, then sailed up the broad mouth of a great river to which they gave the name of James. After several landings for exploration, they chose a low peninsula on the north bank (now an island) and here they landed on 13 May 1607, and named it Jamestown in honor of the King.

Now there was approved by the General Assembly of Virginia, on 25 March 1946, an act to create a commission to be known as 'Virginia's First Settlers Commission,' to engage an artist to paint a large oil paint-

ing of the ships *Sarah Constant, Goodspeed,* and *Discovery*. This painting, with the approval of the Art Commission, was to be hung in a conspicuous place in the Capitol of Virginia, that lovely building designed by Thomas Jefferson in Richmond. Over a year was conscientiously used by Dr. J. D. Eggleston, Chairman, the Honorable Robert K. Brock, Secretary, and the Honorable James A. Baer, in a serious search by correspondence here and abroad for information on the ships and the selection of a marine painter. Having been a Combat Artist in the Navy for well over six years, I was delighted and honored to be chosen and to return once more to nautical research.

One might call these three vessels the ships that nobody knows. There is no certainty as to the exact names of the two larger vessels. The following is absolutely all the information that we have.

SARAH or *SUSAN CONSTANT*
or even *SUSAN CONTENT*
100 tons
Captain Christopher Newport — in command

GOODSPEED or *GODSPEED*
40 tons
Captain Bartholomew Gosnold

The 'pinnesse' *DISCOVERY*
20 tons
Captain John Ratcliffe

There is little data on small English merchantmen at the dawn of the seventeenth century and there is no information as to the previous history or origin of any of the three vessels concerned. That being so, the best one could hope for would be to paint fairly typical vessels of the size and date. Moreover the records of the Virginia Company are missing from 1606 until 1623, because they were surrendered to commissioners of the Crown for an enquiry before the King's Bench.

I went to Virginia and made sketches of the island from a boat and got soundings where I thought best to anchor my ships. I made a thorough study of the architectural setting of the building and determined the size and scale of the painting (6′-6″ x 9′-4″), and decided to paint it in the eighteenth-century manner that it might harmonize with the room.

After much research I produced Plate 1, scale 2″ equals 1′-0″, as a preliminary study of what I wanted to say. Instead of the usual manner of painters of showing the rather distant ships at sea and too often all sails set alike, I had the temerity to bring them right up to the spectator, exposing every detail of hull, spars, and gear, and maneuvering them for anchorage at the voyage's end. Here the molded forms of the hulls were studied as in a model, the length of the vessels computed by their tonnage,

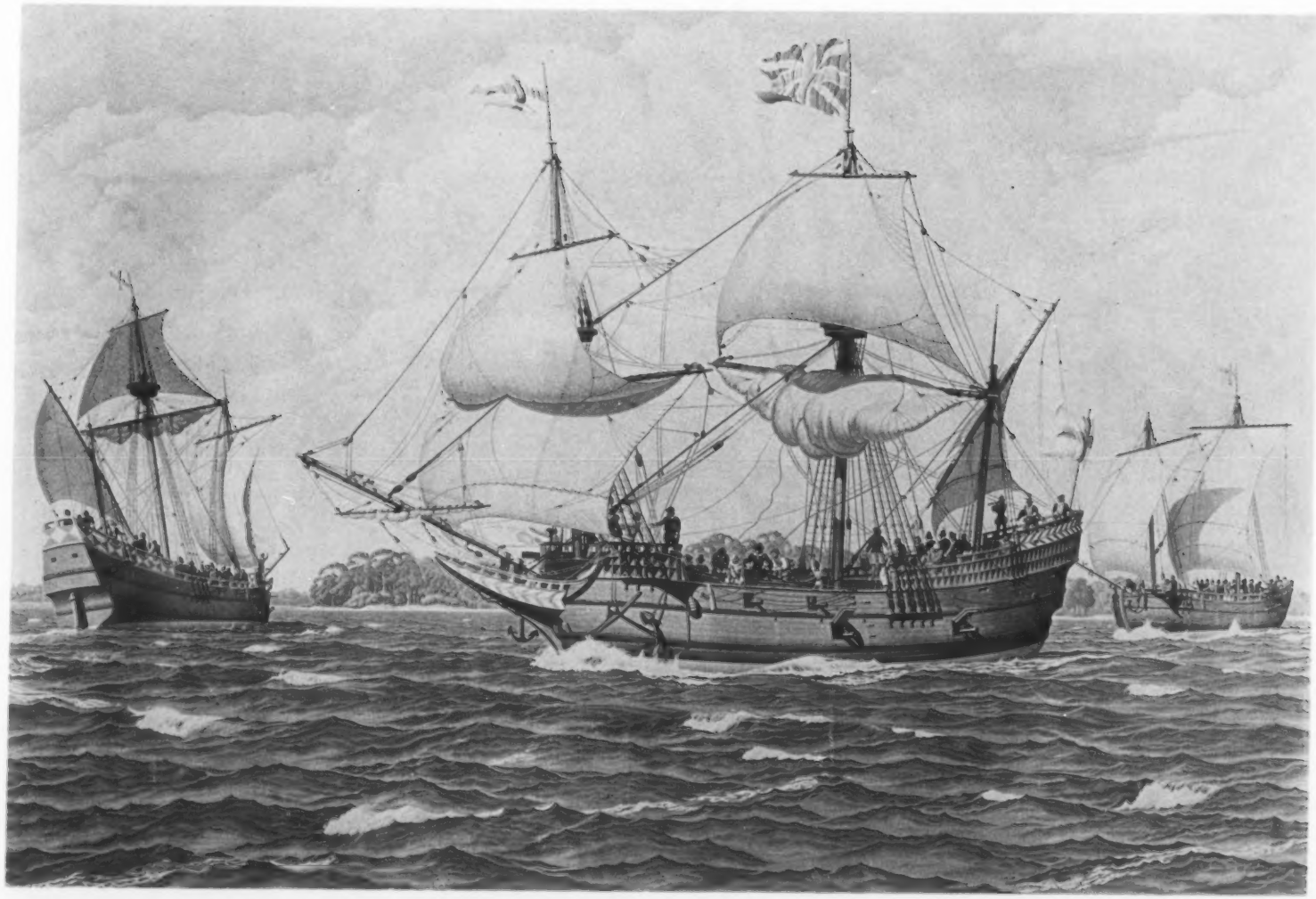
and the proportion of spars to the hulls was determined. The direction of the easterly wind and the position and angle of the sun from the west (mid-afternoon) was decided upon both in elevation and plan.

The length of the vessels from my figuring worked out: *Godspeed,* 40 tons—45 ft. between perpendiculars; *Susan Constant,* 100 tons—74 ft. 6 in. b.p.; and *Discovery,* 20 tons—36 ft. b.p., the beam about one-third of the length. The full-size replica of *Half Moon,* built and presented by the Dutch Government for the Hudson-Fulton Celebration in New York in 1909, a bluffer ship, was 80 tons—56′-6″ b.p. and 3,368 cubic ft. As to armament, I felt that a merchantman of the small size of *Susan Constant* would mount no more than two cannon each side on the lower deck, two small to starboard and port on the upper deck, and of course two stern chasers. Having stuck my neck out on all this, I was tremendously pleased shortly after finishing Plate 1 to receive a copy of a letter from R. C. Anderson from Frome, Somerset, England, to the Virginia Commission. R. C. Anderson is certainly one of the best living authorities on this period. In speaking of his superb model of *Mayflower* he said:

> Of course a ship of 100 tons would not have as many gun-ports as one of 180 tons. I should think a couple on the lower deck well aft, plus two in the actual stern, and perhaps a couple each side amidships on the upper deck. . . . As to rig—topsails only—no mizzen topsail or spritsail topsail—and no topgallants. The *Discovery* would I think be two masted with deep, narrow lower sails on both masts. By the way, topsails in those days were narrow at the head; the topsail yards should not be more than half the lower yards at the most. Neglect of this has spoilt many a picture and model.
>
> As to the intermediate ship, I am at a loss. I know not whether she would be three masted or two. On the whole I think three. I should give her square fore and main with a lateen mizzen and a main topsail—and (if possible) put her well in the background.

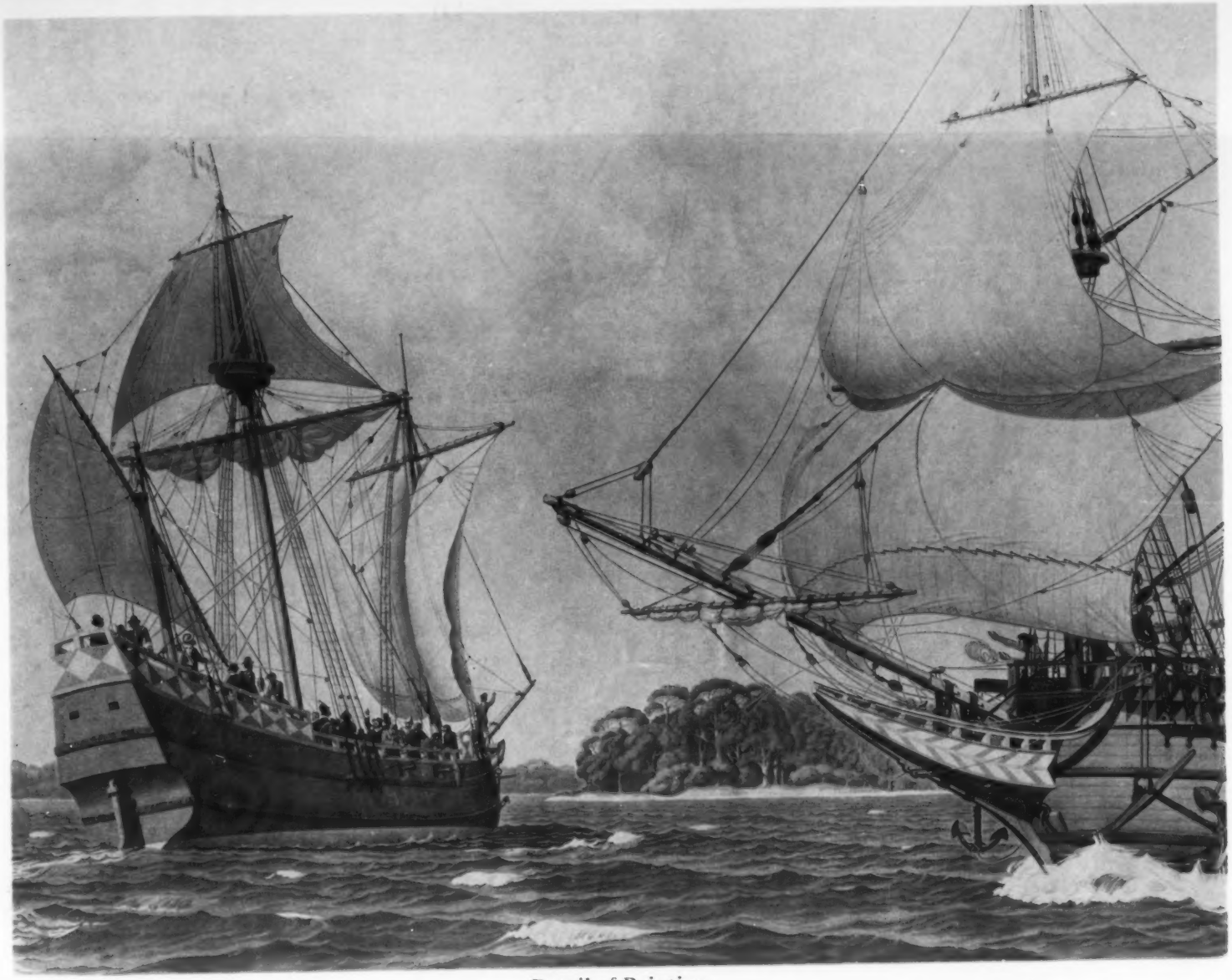
This last remark didn't frighten me, and with my findings on the same bearing with Anderson's, I felt more happy in keeping what I had and developing it.

Plate 2 is 4″ equals 1′-0″ and is drawn with 8H and 9H (very hard) pencils, which gives it the effect of a silverpoint and keeps the multitudinous detail clear. First I moved *Susan Constant* a few inches aft to make a better balance in the composition. Then the skids amidships were discarded. In all my research I became more and more convinced that the model built by R. C. Anderson and L. A. Pritchard of *Mayflower* for the Pilgrim Society of Plymouth, Massachusetts, is the most convincing recreation of a small English merchantman of that size and date. I have only seen the photograph of the model in his book *The Rigging of Ships, 1600-*



Finished Painting 'Arrival of the First Permanent English Settlers off Jamestown Island, May 13, 1607'

English Merchantmen of the size and date of *Godspeed*—40 tons, *Susan Constant*—100 tons, and the 'Pinnesse' *Discovery*—20 tons
Size—9'-4" x 6'-6"

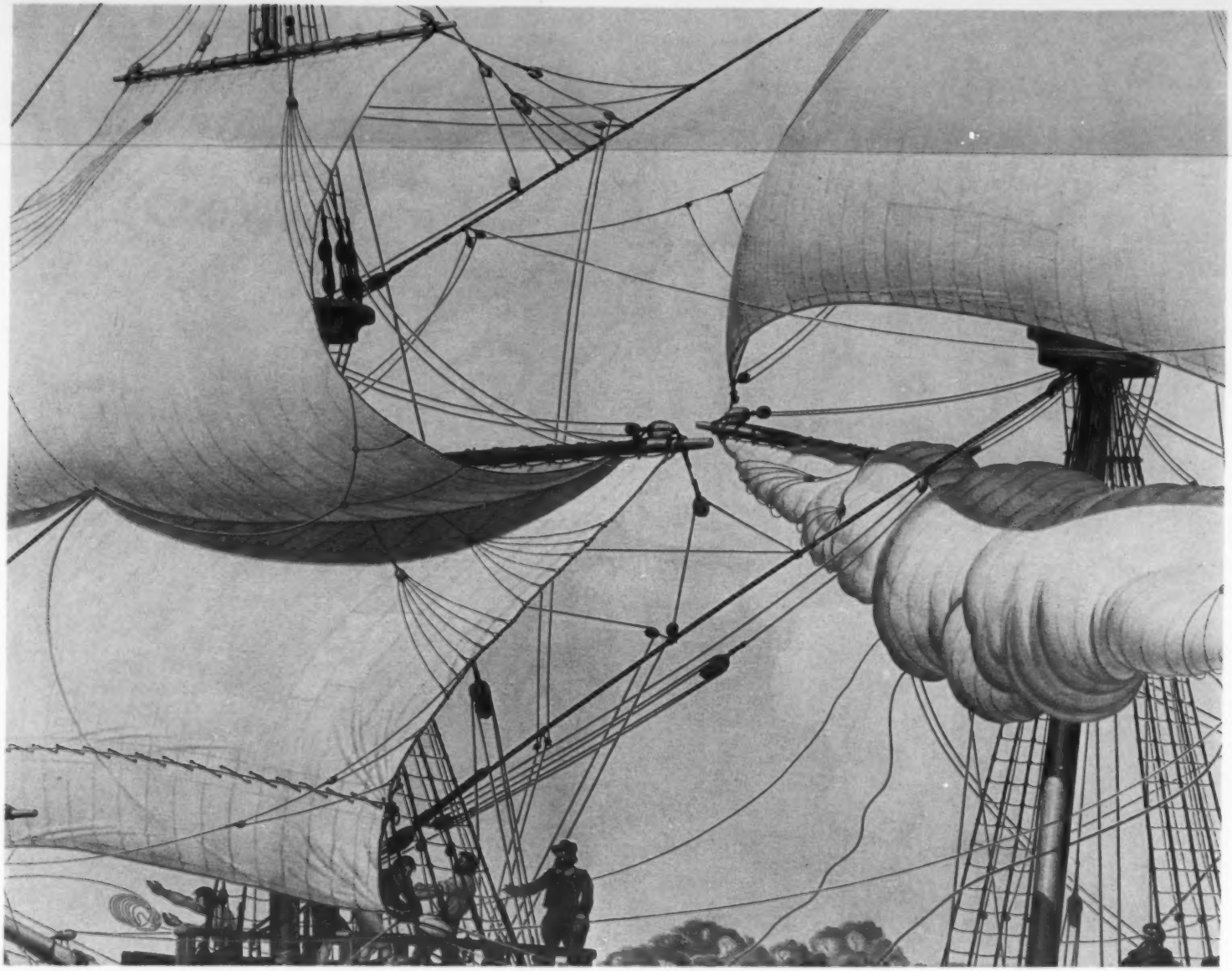


Detail of Painting

This enlargement brings out *Godspeed's* standing and running rigging more clearly. Also *Susan Constant's* spritsail yard with lifts, braces, sling and spritsail sheets, and the rest of the bowsprit gear

Detail of Painting

A closer view of the bald-headed *Discovery*. Decks of *Susan* run almost flat and do not rise with the outboard sheer of the quarter. The lead of the main brace and main sheet are typical of this period



Detail of Painting

Here can be followed the fore-topsail and fore-course braces; sheet, clew and lift; working of bowlines, the passing of earrings and the fitting of robands. Fore-top puttock-plates and main futtock shrouds and staff, together with jeers, garnet and other gear

1720. My grateful acknowledgment to Mr. Anderson for this splendid work which I used to check and recheck my findings.

I built *Susan* on the sheer draft, deck plan and athwartship sections of a drawing of a galleon (*c.* 1600), made for the Science Museum, London, from contemporary plans, 'Fragments of Ancient English Shipwrightry,' preserved in the Pepysian Library, Magdalene College, Cambridge. Although these plans are for a ship of 684 tons burden, I kept the same flat floor, the almost flat deadrise and the quick turn at the upper wale to really flat tumblehome, working on the theory that at that period small vessels were simply a reduction of the larger ships.

The development of this drawing was great fun. (Plate 2) In comparison with the *Mayflower* model, I made *Susan* bluffer of bow, no ports in the beakhead bulkhead, and reduced the culbridge bulkheads to mere 'breaks' in forecastle and quarterdeck. I added rabbits to the port covers as of earlier date, and squared off the upper rails for the same reason. The fore and main shrouds are reduced by one. The foremast has more rake forward and I wish now that I had stepped it just forward of the beakhead bulkhead and given the bowsprit a little more steve. The gunports on the lower deck are reduced from four to two each side, and I added two tiny ports on the upper deck amidships. The running gear is simplified. The hull is planked and secured with fastenings, lead scupper ports for the decks are indicated. The painted patterns on the beak, quarter and poop are also from Magdalene College, and I chose designs that I liked best from color reproductions in my library. Anderson says of his model, 'I think also that the triangular decoration is probably a bit old-fashioned for 1620,—it might be possible in 1607.' I reckoned my ships to be at least fifteen to twenty years old in 1607.

I added rails above the bulwarks and quarter of *Godspeed* to keep the ship's company aboard in heavy weather. When the ships were finished alow and aloft, I put their people aboard costumed correctly and with great care as to scale. Immediately the vessels became extremely small, as they should be, the 'tweendecks a place to double up in, the weather decks hardly roomy. After the long voyage I was sorry to have to send most of the passengers below, but I was forced to in order that the crews might have room to handle the lines without landlubbers fouling them up. Sky, land and river water were then studied and completed, and the drawing was ready to be projected up to the full-size canvas.[1]

When the full-size drawing from the projected Plate 2 had been com-

[1] The Mariners' Museum at Newport News, Virginia, has recently purchased these two preliminary drawings and color sketch. Therefore all my work for this project rests in the old Dominion State.

Here can be followed the fore-topsail and fore [illegible] robands. Fore-top puttock-plates and main futtock shrouds and staff, together with jeers, garnet and other gear

pleted in every detail on the final canvas, with a number of corrections and additions, a careful color study was made at 2″ equals 1′-0″. The paint was then mixed in quantity and applied fairly thickly with no medium, directly in one painting with no retouching or changing. The result is fresh and unlabored, and because of all the preparation there was no feeling of there having been any. It would have been more satisfactory if Plate 3 could have been in color.

On a windy, squally afternoon with sunlight and shadow, *Godspeed* with her fore-course aback is boxhauled as she comes about, and she is at the moment when her tiny main topsail will be braced around and taken aback, as she comes up into the wind and lets her anchor go. (Plate 3) She is making leeway like a crab and will probably be in irons, but that's all right for anchoring. *Susan* is lowering her foretopsail, clewing up her mainsail, and has just set her settee mizzen for wearing around in the opposite direction. The little 'pinnesse' is following aft, to anchor between and astern of the two larger ships. They have hoisted bright colors against the wilderness for they liked the pomp of bunting. Under *Susan's* bowsprit is the western point of Jamestown, and beyond the more distant shore of the Virginia mainland.

To a modern mariner the gear of *Susan* must appear odd indeed. There are no bobstays, no bowsprit shrouds. Even stranger, there are no footropes or horses on the yards. No buntlines and in place of leechlines, the quaint six-legged martinets. Instead of reef points there are bonnets laced only to the courses. There are no standing backstays; however, there is a backstay pendant abaft the foretopmast with a single sheave block stropped to its lower end. (Plate 3) The standing part has four legs hitched to the main topmast stay, and riding through a fiddle-block to which the running part is stropped, passing upward through the pendant block, down to a fairlead block and along the main topmast stay to the foretop and down to the fo'castle head. Small ships had no wooldings on the lower masts and bowsprit. The foretopmast stay had a fiddle-block at its lower end and the running part can easily be followed in the painting. (Plate 4) All the other stays are set up on deadeyes, and the collar of the mainstay passes on either side of the foremast and is crossed and goes under the bowsprit hard against the stem on which the bowsprit rests (Plate 4), before passing inboard and butting against the foremast. The heads of the stays pass around the mastheads and have an eye spliced in the end. To keep this collar from slipping up like a noose, a 'mouse' or lump is raised on the stay. (Plate 8) The 'mouse' is in no way a knot and its raising is described in detail by Darcy Lever. This method was always used at the

end of the seventeenth century, but I believe was new practice and only partially used at this time. The shrouds are left handed or cable laid, and therefore the first knot cast on the lanyard is in the forwardmost hole in the deadeye on the larboard side (Plate 7), aftermost on the starboard. The clove-hitched ratlines can be seen with a glass. The deadeyes are not round, as later, but shaped like a watermelon seed, except those on the martinets which are round. The type of chainplate and the manner of securing the lower iron-bound deadeyes is clearly shown. (Plate 7) The topmasts have no crosstrees (although I put them from habit in the drawings), as *Susan* is too small for topgallants, and I have shown the canvas covered bolsters atop the trussel-trees. The puttock plates for the lower deadeyes of the topmast shrouds pass under the rim of the maintop. (Plate 6) The upper ends of the futtock shroud have eye splices with hooks in them. The hooks go through the puttock plates and each futtock is then given a half hitch round the futtock-staff and one of the lower shrouds and seized to the shroud as well. The futtock staff is also a point of attachment for the 'catharpins,' a sort of complicated tackles running athwart from shrouds of one side to those of the other to keep them taut and to hold them against the pull of the futtock shrouds. An indication of this can be seen abaft the mainmast of *Godspeed*. The gammoning on the bowsprit goes right around the knee of the head and not through a slit which was a later practice. The garnet is secured along the mainstay and will shortly be put to use. (Plate 6)

With most humble apologies to Lewis Carroll, I cannot resist the following parody:

> And hast thou slain the catharpins?
> Come to my arms, my gammoning sailor!
> Oh Puttock day! Futtock! Belay!
> He Woolded like a whaler.

I have tried to show the running gear very clearly. On *Susan* the yards are hoisted by jeers, with the exception of the mizzen where a tie goes through a sheave from aft forward and has a shoe block spliced in its end, and here the knight stands before the mast. On the smaller ships the yards are hoisted by ties and halliards. *Susan's* fore-tack runs through leads under the knee of the head and her main tack through a chess-tree. Bowlines, braces, sheets, clews and lifts can be easily followed. The main topsails brace leads in a strange manner. (Plate 4) Starting secured to the foremost mizzen shroud, the brace runs through the pendant block, back to a block secured below on the same shroud, forward to a block on the aftermost main-shroud and thence down for belaying. The topsail sheets had

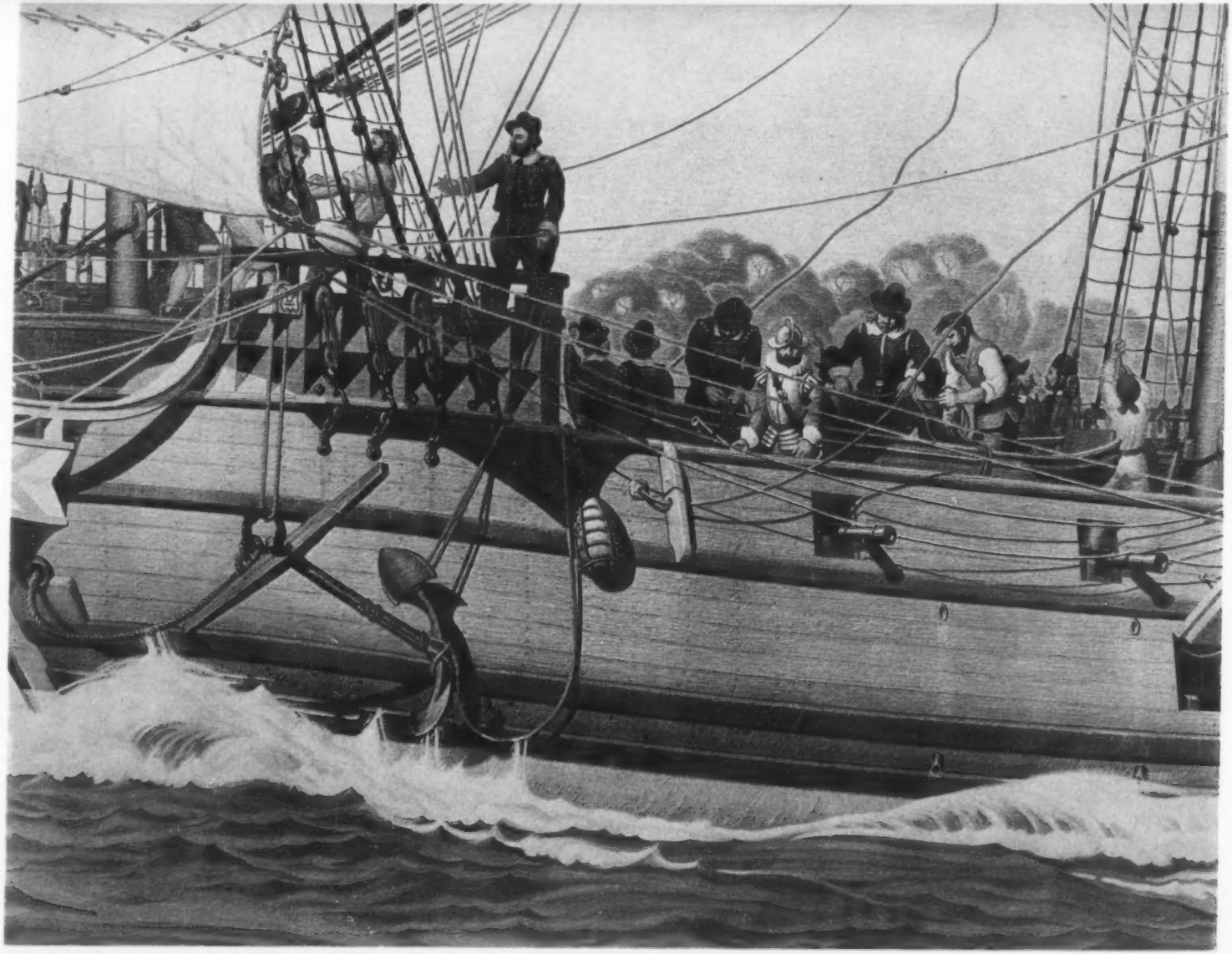
a wall or crown knot and were rove through the clews of the topsails. The sheet then passes through the topsail-sheet block atop the yard, which helps give the foot of the topsail a big roach. (Plate 6) There is a double thickness in the bunt of the foot for chafing against the maintop. The round spritsail sheet blocks with the rim through which pass the double pendants are interesting. (Plate 4) The sheets lead away aft and come inboard below the foresheet. A fairlead is seized in the foremost foremast shroud, which carries them well above the fore-channel.

The sails are bent to the yards with robands. They go through holes in the head-tabling just under the head boltrope, two to each cloth. (Plate 8) They are hard to describe but the effect can be seen in the painting. The mizzen is secured with one turn and the knot is discernible on top of the yard. (Plate 5) The martinets are of course on both sides of the sail, and I trust their working is readable.

Lacing of the bonnets are in four or more parts to expedite the attaching or letting go at once. The head cringle is seized to the clew of the course, and the knot at the end of its leech-rope is held by a twisted strop from the leech-rope of the fore-course above. (Plate 7) Because of the bonnet, the sheet-block has a strop with two legs with a knot on each, the clew-line block a longer strop and of course the tack has a big knot on it. This makes it possible when the bonnet is taken off to move the whole apparatus of sheet, tack and clew line to be refitted to the clew of the course. The outside lacing can be seen on the forecourse and the other side effect on the settee-mizzen. The mizzen course is a true lateen until the bonnet with its short luff is added to the nock-cringle. (Plate 5) Then the lateen tack becomes a bowline with the tack at the foot of the luff of the bonnet. I have led this tack a few feet aft of where it should belay, for better wearing.

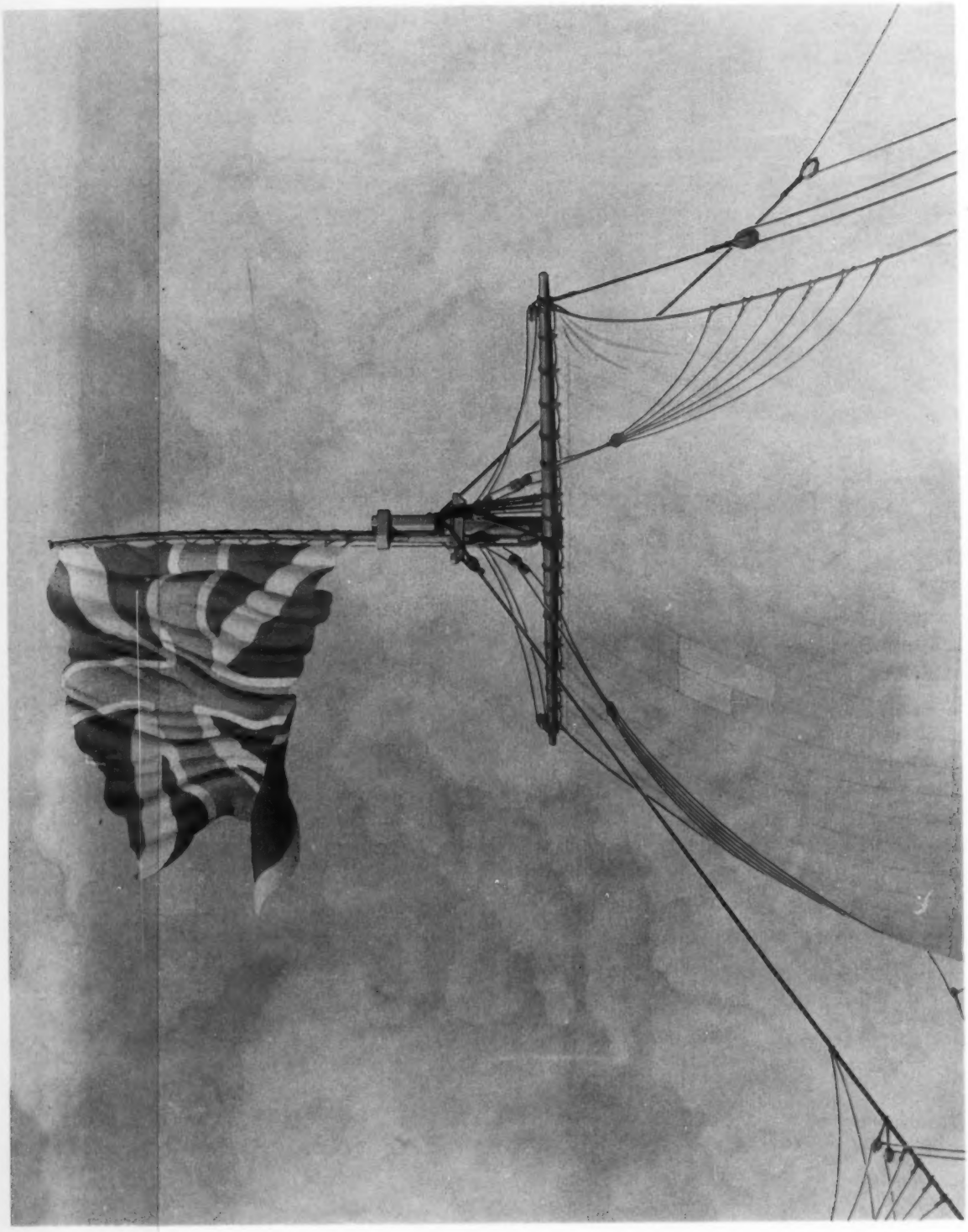
The ground tackle is carefully dated. (Plate 7) There are no bands on the anchor stock, and I cannot understand why Anderson has six on *Mayflower's* anchors. The print by Payne of *Sovereign* 1637, and the drawing by Van der Velde of the same ship, verifies their absence. So does the Science Museum model, and many other documents. My drawing shows flat palms with bill and snape, but after research I came up with shovel-like palms with no bills, which is of the date. I have shown the type of anchor buoy and the passing of the buoy line around the arms at the throat and crown and its seizing to the shank. The cat block has been removed and a tripline passed through the ring for letting go.

I have hoisted the white ensign with the red cross of St. George (now a British Vice-Admiral's flag I think), except on the main topmast staff.



Detail of Painting

The size of these men shows clearly how small the largest ship is. To paint the figures too small is an error often made. The ship's boat is being made ready for lowering by the garnet. There were no tackles to the yardarm at this time



Detail of Painting

The Union Jack of 1606. The shrouds passing over the bolsters on the trestle-trees, the raising of a 'mouse' against the eye-splice of the main top-mast stay, the jeer block at the bunt of the yard, the mizzen lift pendant, head-tabling, robands, martinets, brace and lifts are all shown

(Plate 8) Because of the friction at sea between the Scots and English, James I ordered all English vessels to fly the Union Jack, the red cross of St. George and the white cross of St. Andrew—no cross of St. Patrick. The order was made public 12 April 1606, and as the ships sailed in December of that year, this must have been one of the earliest times that the flag flew against the American forests.

With *Godspeed* I simply made a logical reduction because of tonnage. (Plate 4) A short quarterdeck and no poop, and I eliminated foretopsail and spritsail, and reduced the shrouds on all three masts by one. Two small cannon to a side on the upper deck only. The stern view enabled me to show the character of the rudder and entrance of the tiller inboard. On *Susan* the 'hutch' can be seen just forward of the break of the poop at the foot of the ladder. (Plate 5) Under this arched protection the helmsman's head was just above the quarterdeck, as he stood on a half deck below, swinging the upright whipstaff to larboard or starboard. *Godspeed* also gave me the chance to show the parrels with ribs and trucks, and the entire clew-garnet gear, lead of topsail sheets, etc. (Plate 4) If I had her to do over I should tallow her bottom right up to the lower wale, fore and aft and across the stern like *Susan*. I should also rig her forestay like *Susan's* foretopmast stay for obvious reasons.

Discovery is a flushdeck little bucket without a knee of the head. (Plate 5) I gammoned her bowsprit to the top of the stemhead, rather than having it to one side of the stem, which is perhaps controversial. The rail above the bulwarks stops just forward of the foreshrouds for easier handling of the anchors. R. Morton Nance shows this practice in his page of 'Cromsters,' [*Mariners' Mirror,* V, 48]. Indeed I first made a complete study of *Discovery* rigged as a cromster, forerunner of a hoy, but I abandoned the idea for the rig depicted. Cromsters were ketch-rigged with a forestaysail to the stem, a smack form of mainsail (one extended upon a sprit), a square main topsail, and a small lateen mizzen, a handy rig for coasting. *Discovery's* mainstay comes so high on the foremast that I stropped a fiddle-block to its lower end and rove a tackle through a double sheave block, so that any slack could be taken up from deck. She is so small that I gave her single lifts.

In trying to find out what a pinnace or pinnesse really was lies madness, for the name is indiscriminately given to very different types and sizes of crafts and vessels. It could mean a ship's boat, a small decked-over sea-going galleasse, row barges, and at various times galleots, galleys, frigates or shallops. There were square-rigged, three masted, two decked seagoing pinnesses equipped with oars, of 50 tons and under. The 1587 print

of the 'Black Pinnesse' was rigged something like *Susan* and was apparently larger. The above data I owe to E. Keble Chatterton. Perhaps it may have meant in the Virginia fleet the smallest vessel.

There has been pitifully little that I could find depicted or modeled of the three vessels. In the Hart Museum of the Massachusetts Institute of Technology in Cambridge, Massachusetts, there is a model of *Susan,* showing six guns to a side on the lower deck. Twelve guns on this deck in a hundred ton merchantman to my mind is eight too many. The beak is not convincing either, to me at least. Then there is a watercolor in the Mariners' Museum, Newport News, that doesn't warrant mention from the nautical research angle. In the National Maritime Museum, Greenwich, England, there is a print, 'Merchantman circa 1600,' views and plans of, etc., which is scholarly and excellent. However, perhaps the floor should be flatter and the foremast farther forward. I have heard that Mr. Gregory Robinson, Englishman, did a beautiful painting of *Susan,* but I was unable to find a reproduction of it. There must be more, but here my list ends.[2]

I have tried with utmost sincerity to re-create these little vessels on canvas for Virginia, and if I have, after eighteen months of diligence on my part, made errors, it is because of limitations on my ability. I shall gratefully welcome corrections, for that is constructive for future work.

[2] I have just received a photograph from The Mariners' Museum of a model of *Susan* which has recently been completed for them.

The Iron Sea Elephants

BY WALTER MILLIS

EVERY schoolboy is familiar with the name and fame of Ericsson's *Monitor,* and most of them are under the erroneous impression that she was the first steam-driven, ironclad man-of-war and the direct progenitor of all the mighty steel fleets which subsequently filled the waters of the world. But it is curious how few, whether schoolboys or even naval officers, know anything at all about the Civil War monitor fleet of which she was actually the prototype. Some time ago, having occasion to look into the history of these odd and interesting ships, I was surprised to find how scattered and fragmentary is the information on them in the standard naval works. While the following notes are drawn mainly from secondary sources, they may be of some value as bringing together in one place a brief account of a curious type which also constituted the bulk of the world's first important ironclad fleet developed to meet combat conditions.

While chiefly of antiquarian interest, it is an account not wholly without contemporary significance. In many respects, the story of the Civil War monitors is not unlike that of the vast carrier and landing-craft fleets produced during the recent war. The monitors, like the great sea-air combinations of 1941-1945, were the products of a sudden and dire necessity operating on a ground already fertile with new ideas and experiments. Evoked to meet certain special problems, they rapidly expanded in size and power until it seemed that they would dominate the seas. As with the recent carrier types, the greatest of them were not completed until the war was ending and there was no further chance of testing their battle value. *Miantonomoh,* visiting Europe in 1866, was as formidable a portent as was *Franklin D. Roosevelt* in Mediterranean waters in 1947. Then a few years later the times and technology had changed and the monitors were no more than clumsy anachronisms. Whether the parallel will carry so far again, no one can say, but the possibility is at least instructive.

The Civil War broke out at a time when steam was fully established as a motive power, when the Paixhans shell gun had clearly doomed the wooden warship, when iron armor was known to be the only practicable answer, and when even the turret mounting had received considerable attention, but when no one had as yet combined all these factors into a satisfactory solution for the problems of naval design. There was, however, no dearth of plans and proposals. The Confederate Secretary of the Navy, Stephen R. Mallory, was prompt to realize that ironclad ships offered the South its one chance of breaking the blockade which the North could otherwise impose with its overwhelming superiority in wooden vessels; and as early as June 1861 he was energetically pressing the conversion of *Merrimac* into the ironclad *Virginia*.[1] The Federal ironclad board, authorized by the act of 3 August 1861, and appointed five days later, brought in its report on 16 September. In that brief space it had examined no less than seventeen proposals, and it bravely recommended the adoption of three of them.

The ships undertaken as a result of this report were the rail-plated wooden gunboat *Galena* (C. S. Bushnell & Co., New Haven), the wood and iron frigate *New Ironsides* (Merrick & Sons, Philadelphia), and the odd steam battery with revolving turret designed by John Ericsson. Initially, it is to be noted, this last was never regarded as anything but a coastal craft, offering great possibilities for the special requirements of the war against the Confederacy but in no sense an answer to the sea-going ironclads that had appeared in the French and British navies. *New Ironsides* might fulfill that function; as to *Monitor,* the board frankly reported that 'we are somewhat apprehensive that her properties for sea are not such as a sea-going vessel should possess. But she may be moved from one place to another on the coast in smooth water.'[2]

The Ericsson design, with its light draft, heavy caliber guns, and its solution for the problem of maneuverability in narrow waters by 'maneuvering the guns instead of the ship,' similarly impressed the Secretary of the Navy, Gideon Welles. 'The nautical qualities of the vessel,' as he later explained, were not a 'governing object'; she was 'adapted to the shallow waters of our coasts and harbors, few of which are accessible to vessels of great magnitude,' and that was what was wanted.[3] *Monitor* was put in hand; meanwhile, the Navy Department, already projecting

[1] James Phinney Baxter 3d, *The Introduction of the Ironclad Warship* (1933), pp. 224, 229. Cited as "Baxter."

[2] Frank M. Bennett, *The Steam Navy of the United States* (1896), pp. 264-272, gives the full text of the report. Cited as "Bennett."

[3] *Annual Report of the Secretary of the Navy,* 1862.

a fleet of no less than twenty ironclads, developed a design of its own along somewhat similar lines. By the end of November it had completed specifications for a class rather larger than *Monitor,* likewise of comparatively light draft and low freeboard (3 feet), but mounting two turrets instead of one. These were to be 'Coles cupolas,' following the design already developed by Captain Cowper Coles of the Royal Navy rather than the more primitive Ericsson system.[4] The Navy was asking $12 million for the contemplated fleet. However, the appropriation bill was delayed, and did not pass until 20 February 1862, barely a fortnight before *Monitor* made her spectacular and historic appearance in Hampton Roads.

It is unnecessary to rehearse the well-worn story of the Battle of Hampton Roads, 8 and 9 March 1862. But its effect, as everyone knows, was enormous. Four days after the action John Lenthall, Chief of the Bureau of Construction and Repair, was urging Welles to go ahead with the Navy's projected double-turrets; he was also urging the grander vision of ocean-going ironclads—a fleet of 'first class invincible ocean ships' to keep 'command of the open sea.'[5] But it was the coastal war which came first, and *Monitor's* success had swept the field in favor of the Ericsson design. On 31 March, three weeks after the battle, Ericsson received contracts for six more of the type, while four additional ships of the same class were ordered from other builders. These were the ten *Passaics,* which were to see more service, first and last, than any others of the monitor fleet. Ericsson, pleased with the success of the name he had given to his first product, labelled his sextette *Impenetrable, Penetrator, Paradox, Gauntlet, Palladium,* and *Agitator;* fortunately, the Navy Department disapproved and with better taste designated the ten ships *Passaic, Montauk, Catskill, Patapsco, Lehigh, Sangamon* (later renamed *Jason*), *Camanche,*[6] *Nahant, Nantucket,* and *Weehawken.*

On 19 March, ten days after the battle, the Department recommended that the wooden frigate *Roanoke* (a sister ship to *Merrimac* and present at Hampton Roads when the latter emerged for her onslaught) should be

[4] Baxter, pp. 274, 275-278, Appendix F. The Coles cupola was carried on a ring of iron rollers under the bottom edge of the turret rather than on the single central spindle which sustained the whole weight of Ericsson's turret whenever it was keyed up for training. Coles's design also contemplated sinking the base of the turret with its training mechanism behind a 'glacis' of fixed armor, comparable to the later barbette. There is a drawing in Baxter, p. 188.

[5] Baxter, pp. 303, 305.

[6] *Camanche* had a curious career. The contract was awarded to the San Francisco firm of Donahue, Ryan & Secor, but the parts were actually fabricated by the Secor firm in Jersey City. Her engines were cannibalized to repair *Weehawken* when the latter broke down on the Carolina coast. Ultimately the completed parts were shipped out around Cape Horn in the hold of a sailing vessel; the latter unfortunately sank at her dock in San Francisco with the disassembled *Camanche* still on board. The parts were later recovered, but the monitor was not reassembled and completed until 1865. Bennett, pp. 339-340.

razeed, armored, and provided with center-line turrets.[7] On 25 March a contract was given to Charles W. Whitney of New York for *Keokuk*, an ill-fated experiment springing from one of the designs which had been unsuccessfully submitted to the ironclad board in the preceding fall. Her armor was of alternate strips of wood and iron; her two 11-inch guns were carried in two armored 'towers.' Each of these was a fixed conical structure with three gun-ports—center-line, starboard, and port—through any one of which the piece could be trained.[8] The Department pressed on. A contract was awarded to George W. Quintard of New York for the big double-turret monitor *Onondaga*, while four more double-turrets were ordered from Navy yards. These—*Miantonomoh, Monadnock, Agamenticus* (later renamed *Terror*), and *Tonawanda* (later *Amphitrite*) were destined to live long in name if not, exactly, in fact. They were the products of the Navy's own program of November; but Hampton Roads materially modified their design. The Coles cupolas were abandoned in favor of Ericsson turrets, each mounting two 15-inch guns; although unlike the Ericsson monitors, which were built of iron with wood introduced only as backing for the side armor, these were wooden vessels.

These seventeen vessels, plus the three of the original program, represented a very extensive building policy. Still the Navy did not stop. The growing fleet of western river 'tinclads' was still under Army control, but the Navy sensed the probable need for a heavier type for use on the lower Mississippi or along the coast; and on 27 May it ordered from various inland boatbuilders four double-turret, monitor-type vessels to the design of James B. Eads. These—*Winnebago, Chickasaw, Kickapoo,* and *Milwaukee* —were interesting ships. Their decks were crowned into a turtle-back; they had quadruple screws driven from two main engine shafts, and the Eads 'disappearing' turret.[9] Though the turret itself did not disappear, the guns were mounted on a steam-operated elevator which dropped them to the lower deck, where they were loaded from protected handling rooms, then hoisted and run out through ports defended by automatic, steam-operated shutters. It seems a much more modern and ingenious design than Ericsson's, and Mobile Bay would appear to prove that it worked.[10]

[7] Baxter, p. 305. These were to have been Coles turrets, but, according to Bennett, the Ericsson system was finally adopted. One result was that the keel proved too weak to carry the weight concentrated on the spindles. When the turrets were keyed up for training they threatened to 'force out the bottom.' There is a spirited lithograph of *Roanoke* with her three Ericsson turrets in the collection of the New York Historical Society.

[8] Bennett, p. 348. A drawing in the collection of the New York Historical Society clearly shows the arrangement.

[9] Bennett, p. 347-348.

[10] The system is described in a pamphlet in the New York Public Library, *Eads Revolving Steam*

The Navy Department had still larger plans. On 3 July a contract was given to W. H. Webb of New York for *Dunderberg*, a large sea-going 'ironclad frigate ram' of the broadside type.[11] And on 28 July Ericsson received contracts for two giant single-turret monitors, *Puritan* and *Dictator*. Bennett gives the displacement as 4,438 tons;[12] of massive size and large fuel capacity, these were intended as ocean-going vessels. The monitor type, evolved expressly to meet the special needs of coastal warfare against an enemy without sea-power, was growing with success into altogether more ambitious forms.

Nevertheless, the coastal war was still the important thing. In September orders were given to various builders for nine more Ericsson monitors of less grandiose dimensions. *Canonicus, Catawba, Oneonta, Mahopac, Manhattan, Tecumseh, Saugus, Manayunk* (later *Ajax*), and *Tippecanoe* (later *Wyandotte*) were somewhat enlarged and improved versions of the *Passaics*. Thus, within six months after Hampton Roads, the government had ordered, in addition to the western river flotilla, no less than thirty-three coastal or ocean-going ironclads. Thirty of them—ten *Passaics, Onondaga,* four *Miantonomohs,* four *Winnebagos,* two *Dictators,* and nine of the *Canonicus* class—were on the monitor principle. Considering the paucity of experience available, these were bold decisions—like many of those which had to be taken during the recent war—and in the meantime, unfortunately, the experience had begun to come in.

Monitor's initial victory had perhaps blinded the Navy Department, and had certainly blinded both Ericsson and the public, to the fact that she had her defects. She had given her people a tough time getting to Hampton Roads under tow from New York. They ran into heavy weather, and *Monitor* quickly revealed that, however solid her defenses against Confederate shot, she was very weak in her defenses against the sea. Chief Engineer Alban C. Stimers, who had supervised her construction as representative of the Navy Department and had come along as observer and adviser, enthusiastically reported her 'the finest sea boat I was ever in.' But this must have been the verdict of love, since she had nearly killed him both by drowning and asphyxiation. Her executive officer, Lieutenant S. Dana Greene, took a darker and more accurate view. 'I do not,' he severely reported, 'consider this steamer a sea-going vessel.' The motion

Turret (Washington, 1864). Eads' article in *Battles and Leaders of the Civil War*, I, 343, says that the Navy allowed him to place only one of these turrets on each of two of the ships—*Chickasaw* and *Milwaukee*—the others to be on the proven Ericsson system. If the Eads turrets failed, they were to be replaced with Ericssons. There is a good view of *Kickapoo* in *The Photographic History of the Civil War*, VI, 321.

11 Bennett, p. 350.

12 Bennett, p. 343.

was easy enough ('she is buoyant but not very lively') but she lacked power to go against wind and sea and was nearly swamped by the torrents of water that poured through her inadequately protected deck openings as she wallowed virtually submerged through the seas. Even Stimers had to admit that 'it is only the man who has studied the philosophical laws of floatation and stability who feels exactly comfortable in her during a gale of wind.'[13] As Greene afterward remembered it:

> The berth deck hatch leaked in spite of all we could do and the water came down under the turret like a waterfall. It would strike the pilot house and go over the turret in beautiful curves, and it came through the narrow eye-holes of the pilot house with such force as to knock the helmsman completely round from the wheel. The waves also broke over the blower-pipes [temporary trunks erected over the holes in the deck which served in action as air intakes and smoke vents] and the water came down them in such quantities that the belts of the blower-engines slipped and the [main] engines consequently stopped for lack of artificial draught.[14]

Simultaneously the engine-room filled with gas and fumes. The devoted Stimers, together with *Monitor's* engineer, First Assistant Isaac Newton, were dragged out 'more dead than alive' and had to be laid out on the turret top, where the fresh air happily revived them. With the pumps failing for lack of steam, only a lucky moderation of the weather saved the ship from foundering.

Her famous action suggested that her military no less than her seakeeping qualities left something to be desired. Her 11-inch smoothbores, which had made no very critical impression on *Merrimac's* armor, seemed too weak for their task. Owing to the arrangement of her heavy port stoppers only one gun could be run out at a time (a little appreciated fact which vitiates all the many drawings showing her with both guns firing together) and the service was slow.[15] The conning tower in the bow was a nuisance; it rendered ahead fire impossible and when the speaking tubes failed it left the captain cut off from communication with his guns. Lines painted on the deck in order to indicate the position of the turret in relation to the ship were soon obliterated; consequently, when the conning tower did manage to report the enemy's bearing those in the turret had no way of knowing where the bearing was. All they could do was to run out a gun and start revolving until the enemy appeared in the sights; and even this was difficult, as the turret proved hard to start and almost equally hard to stop.[16]

[13] *Official Records of the Union and Confederate Navies in the War of the Rebellion*, Series I, VII, 26, 27, 170. Cited as 'ONR.'

[14] *Battles and Leaders of the Civil War*, I, 720-721. Cited as '*Battles.*'

[15] ONR, VII, 411.

[16] *Battles*, I, 721. Even Stimers, the engineer, who took over the job when Acting Master L. N.

Soon after the action the rail-plated *Galena* with her tumble-home sides joined the squadron; and on 15 May she and *Monitor,* now under the command of Lieutenant William N. Jeffers, who had replaced the wounded Worden, were sent up the James to try the forts at Drewry's Bluff. The Stevens brothers' armored gunboat *Naugatuck,* which was never accepted by the Navy, also went along under the command of a Revenue Marine officer.[17] *Naugatuck* burst her one gun and no more was heard of her. *Galena* was badly holed; she suffered casualties from fragments of her own iron flung about inside the ship, and though she remained in service throughout the war and was in Farragut's line at Mobile Bay, she was put down as a failure as an ironclad.[18] *Monitor* survived well enough, but Jeffers stated his view of her with some asperity. Hampton Roads, he observed, had 'caused an exaggerated confidence to be entertained by the public in the powers of the *Monitor,* which it was not good policy to check. I, however, feel that I owe it to you, sir, to put on record my deliberate opinion.' It was not high; partly, perhaps, because the awkward location of the conning tower had forced him to take station in the turret-top hatchway, protected only by 'barricades of hammocks' from the lively fire of the Confederate riflemen on the bank. Jeffers, a somewhat corpulent man,[19] was acutely aware of the 'inconvenience' of this arrangement.

There were other failings. Not only did the conning tower preclude ahead fire, but when a gun was fired due aft the blast effect on the boilers under the after deck was 'very great'; as a result, the practicable field of fire seemed to be only about 220° out of the intended 360°. Ventilation was a grisly failure. Under the southern sun the temperature reached 140° in the turret, while below the combination of powder smoke, boiler fumes, heat, and stench was insupportable.[20] Jeffers made the further observation, later well borne out, that while the type could run by any existing coastal forts, it lacked the weight and rapidity of fire necessary to reduce them.[21]

Stodder was disabled, found the turret hard to manage. Stimers, incidentally, had served for a time as chief engineer of *Merrimac* when, as a graceful steam frigate, she still 'sailed under an honorable flag.' ONR, VII, 27.

17 Bennett, pp. 314-315.

18 ONR, VII, 357-358.

19 *Photographic History of the Civil War,* VI, 153.

20 Another feature of the monitors not always understood was the fact that the turret roofs were open grids or gratings of railway iron; the turrets themselves thus served as exhaust ventilating trunks and were the main reliance for keeping the under-deck areas habitable. But they must have been traps for the southern sun as well as for rain. The monitors quickly learned to spread awnings over their turret tops and iron decks. In the photographs these awnings lend a kind of gala or at least summer-resort air to these queer ships, but they must have been grim necessities.

21 ONR, VII, 410-413.

Some of these lessons were applied in the ten *Passaics* which were now coming on. They were given round armored conning towers centered over the turrets (this was done by carrying the central spindle up to the roof level and mounting the conning tower in a fixed position upon it), standing funnels, armored a third of the way up, and standing air intake pipes. And Secretary Welles insisted on 15-inch guns. The monster new weapons were ready and tested by October, but when it came to mounting them it was found that the gun-ports of the new ships were too small to receive the muzzles. According to West's life of Welles, there was doubt as to whether this was due to an error in calculation or to the stubbornness of Ericsson, a testy and irascible genius who could admit no flaws in his designs. He had, at all events, devised a 'muzzle box' to confine the blast and permit the guns to be fired inside the turret.[22] The *Passaics* were finally armed with one 15-inch arranged on this system and one 11-inch (in some an 8-inch Parrott rifle) on the normal plan. But the somewhat larger *Canonicus* class, ordered in September, were designed for two 15-inch, and the Navy insisted that they should fire with protruding muzzles.

On 26 August the ponderous broadside ship, *New Ironsides,* reached Hampton Roads. Slab-sided and flat-topped, she was not a thing of beauty; and though she was greatly admired at the time, she had her own peculiarities. In deference to sailing ship requirements (she was designed to carry a full bark rig) the armored conning tower had been placed abaft the large, squat funnel, thus severely reducing what little visibility was afforded by the slits. She had been sent down, however, without waiting for her spars. Her captain begged to have them, as he found that while he could get a maximum of seven knots out of her under steam she would not steer at a speed above five or six; and he believed that without her sails she would be unmanageable in heavy weather.[23]

But at all events, the ironclad fleet was beginning to take shape. As winter approached, the *Passaics* were coming to completion. The first of them, *Passaic* herself, had a dangerous trip from New York under tow, and had to be sent to the Washington Navy Yard for boiler repairs. Mr. Lincoln visited her there with much interest;[24] while the Navy Depart-

[22] Richard S. West, Jr., *Gideon Welles: Lincoln's Navy Department* (1943), p. 222. Cited as 'West.' Baxter implies that the internal firing arrangement was deliberately adopted to overcome the difficulties experienced with the slow and ponderous port-stoppers. West says that Ericsson held that enlarging the ports would unduly weaken the turret wall. *The Photographic History of the Civil War* gives a view of *Catskill* (VI, 173) in which the muzzle box can be dimly seen.

[23] *Report of the Secretary of the Navy in Relation to Armored Vessels* (1864), p. 30. Cited as '*Armored Vessels.*'

[24] West, p. 224.

ment, anxious to utilize the squadron for the attack on Charleston, hurried on the rest. As the year 1862 ran out, the southward procession began. *New Ironsides* was despatched as flagship. On 29 December *Monitor,* now under Commander J. P. Bankhead, and *Passaic,* under Captain Percival Drayton, left Hampton Roads, each, as usual, under tow. Off Hatteras they ran into a southwest gale; and by nightfall on 30 December *Monitor* was laboring heavily, with her people fighting another desperate battle against the incoming water. Bankhead thought that the violent pounding of the projecting armor belt or 'upper vessel' must have torn it loose from the lower hull, an idea which started a fierce controversy between Ericsson and the Navy. Wherever it was coming from, the rising water in due course put out their fires, and the game was up. About 11:00 P.M. they made signal of distress. Boats from her consort succeeded, by heroic seamanship, in getting a majority of the crew off the floundering, submerged raft; but when she finally went under in the darkness and the gale she took sixteen of her officers and men with her.[25]

Passaic made it, but by a narrow margin. The builders had neglected to clean out her bilges, and the pumps and limber-holes clogged; she also pounded her armor belt very heavily. Drayton thought that this feature, together with the opening around the base of the turret, would 'prevent these vessels from ever being safe at sea.' However, John Rodgers, coming down a little later in *Weehawken* and encountering all the same troubles, boldly cast off his tow-line and was able to ride the gale alone without too much difficulty. He also suspected the 'upper vessel' (he had thoroughly calked his hatches and turret base) but he thought that safety for the type was simply a question of building enough strength into it.[26]

On 4 January 1863, Worden, now recovered from his wound, arrived at Beaufort in *Montauk,* and in due course *Patapsco, Nantucket, Nahant,* and *Catskill* joined. Admiral Du Pont made some preliminary tests both of the monitors and their 15-inch guns by sending them against Fort McAllister on the Ogeechee River; the results were encouraging, although various minor troubles developed and a new difficulty appeared. The laminated armor was held together by heavy bolts, and under the impact of enemy shot these sheared off their nuts and flung them about the interior with deadly effect. In some of the ships the danger was easily countered, however, by lining the turrets and conning towers with sheet iron.[27]

By 7 April 1863, Du Pont felt ready for the great attempt on Charles-

[25] Bennett, p. 333; ONR, VII, 345-348.
[26] ONR, VIII, 342, 372; also in *Armored Vessels.*
[27] West, p. 229.

ton. At noon that day he weighed and stood in against Sumter with *Weehawken* leading, followed by *Passaic, Montauk, Patapsco, New Ironsides* (flag), *Catskill, Nantucket, Nahant,* and Whitney's *Keokuk*—with her 'striped' armor and fixed gun-towers—bringing up the rear. It was the first major test of the new ironclad fleet. As they came up to Sumter the leading monitors found the way blocked with channel obstructions and the line was thrown into 'some confusion.' The lumbering *New Ironsides* had to anchor twice to avoid going aground; she became, 'in a measure, entangled with the monitors' and was finally forced by her deep draft to take station on the fringes of the battle, too far away to do much. But the monitors stood and slugged it out with the fort at closer quarters from 3 to about 4:30, when Du Pont made signal to withdraw because of the state of the tide and his desire to clear the channel before dark. The mighty 15-inch guns had made no very noticeable impression on Sumter, but neither had the concentrated fire of the fort appeared to make much impression on the monitors. *Keokuk's* armor proved a flat failure; her upper works were riddled and she was holed so badly at the waterline that she sank later in the night. But nobody minded much about her, and Du Pont withdrew intending to renew the action next day.

But then the monitor captains came aboard to report. Though it turned out that they had suffered but a single fatality (a man killed in the conning tower of *Nahant* by a flying fragment of armor broken from the inner wall) four of the seven monitors had been, in the admiral's somewhat gloomy view, 'wholly or partially disabled.' The top of *Passaic's* conning tower had been almost knocked off and her turret had jammed for a time. *Nahant's* turret jammed. The slides of *Patapsco's* rifled gun were smashed when a shot struck at the turret base. *Nantucket* blew the bolts off her muzzle-box with the first round; after the third the port-stopper jammed and the gun was out of action. Most of this damage was of a temporary nature, but Du Pont was not an engineer and he was far from ironworks, machine shops or anything approaching the repair facilities of the modern navy. He gave it up; the action was not renewed.[28]

It was a stunning reverse after all the high hopes that had been pinned on the armorclads, and it precipitated a storm of controversy over the soundness of the monitor design and the Navy's building policies. Secretary Welles and the Department refused to be swayed by it. As a result of the monitors' experiences at sea Ericsson was forced reluctantly to reduce the projecting armor belt in the *Canonicus* class, but the building went forward. Then on 17 June John Rodgers took *Weehawken* into Was-

[28] *Battles,* IV, 39; *Armored Vessels,* pp. 55-74.

saw Sound to meet the formidable new Confederate ironclad *Atlanta*. *Weehawken* fired only five rounds, getting four hits which drove her adversary aground and to ignominious surrender in the space of fifteen minutes. *Nahant*, acting in support, never had a chance to get into action.[29] Secretary Welles, who had insisted on the 15-inch gun, felt himself fully justified.

On 6 July Du Pont was replaced by John A. Dahlgren, who had a better understanding of the machine age and a greater confidence in the monitor type. The Army had meanwhile been called in against Charleston, and the combined forces settled down to a slow siege of the port. In a series of actions throughout the summer and fall the monitors (reinforced by *Lehigh* in August) won no single spectacular victory, but they proved themselves tough and useful little ships, valuable not only against the forts and in support of infantry ashore but even as blockaders.[30] Dahlgren calculated that from his assumption of command up to 7 September his eight monitors fired over 3,500 rounds, taking 1,030 hits in return without serious disablement.[31] He acquired a high regard for his 'shotproofs.'

Meanwhile *Roanoke*, *Merrimac's* sister frigate which had been cut down and given three center-line turrets, arrived at Hampton Roads in July on her trial trip. While this design was actually more prophetic than were the monitors, *Roanoke* herself was a failure. Her captain reported that she rolled so heavily and dangerously as to be useless as a sea-going ship, while her draft was prohibitive for coastal service.[32] She was sent back to New York to serve out the war in the harmless duty of protecting the city's merchants from their own fears of Confederate raiders. The Navy returned to the monitor system, and toward the end of the year put in hand in various Navy yards a new class of four ocean-going battleship monitors—giant developments of the original idea, at least suggestive, in their own way, of the *Midway* class of giant 'battle carriers' which were likewise begun too late to see any fighting. 'These,' as Bennett puts it, 'were big vessels (5,660 tons displacement) with big names—*Quinsigamond*, *Passaconaway*, *Kalamazoo*, and *Shackamaxon*.' With wooden hulls, like the *Miantonomohs*, they were to have not only two turrets but two funnels as well. With their 15-inch guns, they were said to 'surpass in defensive and offensive power any vessels which have yet been constructed here or in Eu-

[29] *Annual Report of the Secretary of the Navy*, 1863; Bennett, pp. 378-379.

[30] *Armored Vessels*, pp. 579-588. Dahlgren's report is also in Frank Moore, ed., *The Rebellion Record*, X, 186.

[31] *Armored Vessels*, p. 584; Bennett, p. 382.

[32] *Armored Vessels*, p. 49.

rope,' and were clearly not designed merely to fight the Confederates.[33]

For the war still in progress, the Navy also ordered in this same year, 1863, the twenty light-draft, single-turret monitors of the *Yazoo* class, mounting one gun and intended to work up the shallower inlets and creeks. They were a complete fiasco. All were put in hand at the same time; unhappily, when the first was launched it was found that owing to various mistakes and miscalculations she possessed what one writer delicately describes as 'negative buoyancy,' and it was then too late to do much about the others.[34] Some were made to float by removing the turret armor, leaving the gun wholly unprotected, but in that state their military value was obviously slight.[35]

Early in 1864 the enlarged *Passaics* of the *Canonicus* class began to go into service, and the big double-turret *Onondaga* appeared. *Onondaga* together with three of the *Canonicus* class—*Tecumseh, Saugus,* and *Canonicus* herself—and the captured ironclad *Atlanta* were stationed in the James to coöperate in Grant's operations against Richmond. They effectively blocked the river against a sortie by the Confederate squadron (including the second *Virginia* ironclad) but they were not boldly used and made no great names for themselves. Then in May Farragut wrote urgently from the Gulf, reporting the formidable characteristics of the ironclad ram *Tennessee* which the Confederates were fitting out in Mobile Bay and which threatened to reduce his unarmored squadrons to matchwood. 'I therefore deeply regret,' he observed, 'that the Department has not been able to give us *one* of the many ironclads that are off Charleston and in the Mississippi.'[36] The Department's answer was to rush two of the double-turret Eads monitors—*Chickasaw* and *Winnebago*—from the Mississippi, to detach *Tecumseh* from the James and to send her with her sister ship *Manhattan* to the Gulf.

Thus reinforced, Farragut stood in early on the morning of 5 August 1864 against the Mobile Bay forts and *Tennessee,* the latter commanded by the same Franklin Buchanan who had opened the ironclad war in the conning tower of *Merrimac.* Farragut advanced in two lines ahead, with his four monitors, led by *Tecumseh,* in the starboard line, nearest to Fort Morgan and a little ahead of the wooden ships in the port line. As *Tecumseh* came up with the fort, she fired each of her 15-inch guns and then reloaded to be ready for *Tennessee.* Shortly afterward, forging ahead into

[33] Bennett, p. 400.

[34] West, p. 242.

[35] *Photographic History of the Civil War,* VI, 177, shows one in this condition.

[36] Charles B. Boynton, *History of the Navy During the Rebellion* (1867), II, 531. Cited as 'Boynton.'

the bay, she struck on a Confederate mine; she was seen to lurch heavily forward and slide straight to the bottom, her screw racing momentarily in the air as she disappeared. Ninety-two men and officers were lost with her. Farragut may or may not have 'damned the torpedoes'; at all events, he drove the rest of the squadron ahead through the confusion and closed with the bravely charging *Tennessee*. It took nearly an hour to batter her into surrender, a task in which most of the ships participated but in which the remaining monitors did the heavy work. And in these three ships not a single man was even injured.

In the summer of 1864 the four wooden-hulled, double-turret *Miantonomohs*—the products of the Navy Department's original program, advanced even before *Monitor* had been completed—at last began to come upon the scene. Built without the projecting armor belts, they were successful sea boats; and there is a dashing report of *Monadnock* in heavy weather, with her deck virtually submerged and the angry seas 'curling well up the turrets' and flinging their spray across the tops. Admiral Porter thought her 'the best monitor afloat' and was sure that she could 'safely and expeditiously go anywhere.'[37] But obviously everything had to be tightly calked under such conditions. *Tecumseh's* disaster was not the only reminder of the dangerously small reserves of buoyancy which the type possessed. In December 1863, *Weehawken* suddenly and rather mysteriously foundered while lying at anchor off Charleston, perhaps because of a failure to close the forward hatch against a rising swell; and in the same harbor a year later (January 1865) *Patapsco* drifted down on a Confederate mine and sank with equal suddenness.[38]

The more powerful later ships were coming to completion, but so was the war—a circumstance again suggesting the experience of the recent conflict. The monitors' last chance for important service was in the bombardments of Fort Fisher, December 1864 and January 1865. *Canonicus* and *Saugus* were withdrawn from the James for this duty; *Mahopac* of the same class and *Monadnock* were sent along and the veteran *New Ironsides* was brought up. Ericsson's massive single-turret *Dictator* was also ordered to the scene, but her heavy propeller shaft destroyed its bearings before she had gone twenty miles and she had to turn back.[39] *Canonicus, Saugus, Mahopac,* and *Monadnock,* standing inshore of the wooden fleet, did the heavy work of the bombardments; as with Iwo Jima, however, the fort still had to be taken the hard way, with naked infantry. In March 1865

[37] ONR, XI, 67.

[38] Bennett, pp. 382, 498.

[39] Bennett, p. 344.

Milwaukee, one of the Eads monitors, was mined and lost in the headwaters of Mobile Bay; this was the last combat experience of the Civil War monitor fleet.

It was, however, by no means their last appearance in history. The Civil War ended with the American people under the exhilarating impression that they possessed the most powerful navy in the world. The monitors, beginning as mere coastal floating batteries, had sprouted 15-inch guns, more powerful than those carried in the ships of any other nation, and had grown to ocean-going tonnages and cruising radii. Their enthusiasts compared the French and British ironclad types most unfavorably to these mighty developments of an unconventional 'Yankee notion,' and saw the latter sweeping the seas for the American flag. Other powers had something of the same idea; and it seems probable that the existence of the monitor fleet assisted in dissuading Britain from intervention and in eliminating the French from Mexico.

Indeed, when properly calked the monitors could, like the modern submarine, keep the sea well enough. To prove it, *Monadnock* was sent out to the Pacific Coast over the long and dangerous route around South America, while *Miantonomoh* in 1866 carried Assistant Secretary Gustavus V. Fox across the Atlantic and back on a ceremonial visit to Russia.[40] Perhaps the monitors were actually rather closer to the submarine idea than to that of the later battleships, of which they are so often supposed to have been the progenitors. To keep the bulk of the ship under water in order to reduce target area and vulnerability was a major aim of their designers.[41] Like the elephant, which was said to swim virtually submerged, drawing air through its uplifted trunk, the monitors were expected to wallow through rather than over the ocean seas, breathing in through their standing air trunks and out through their grated turret tops. There is more than a fanciful resemblance between the rounded heads of their air intakes and the 'snorkel' heads of the post-war submarines; and the Reverend Dr. Boynton was being complimentary when he described them as 'iron sea elephants.'[42]

The Europeans may have looked thoughtful when they saw *Miantonomoh's* huge gun muzzles peering from their massive turrets as she lay at anchor in their harbors.[43] But the monitors had an obvious defect.

[40] Bennett, pp. 589-592.

[41] The Stevens gunboat *Naugatuck* was provided with water ballast tanks to reduce her freeboard in action, and a similar installation in the *Yazoo* class was one source of its calamities. West, p. 241.

[42] Boynton, I, 183.

[43] Bennett, p. 345, gives a photograph of *Miantonomoh* lying in an unnamed European port. It gives a good idea of the type, with its peacetime arrangement of boats and flying bridges.

Though they could keep the sea, they could not possibly fight on it. They dared not train their turrets or even open their gun-ports in heavy weather. Until the problem of mounting heavy guns and armor on sea-fighting as well as sea-keeping ships could be solved, there was no doubt a certain logic in these ocean-going floating batteries, sufficiently invulnerable to force their way past the high seas fleets of the time in order to carry a war to the enemy coast. But the development of a satisfactory high-freeboard battleship was bound to end their usefulness; this was the problem on which the European designers were engaged, and the semi-submerged monitor type made little direct contribution to its solution.

Dunderberg, the powerful broadside 'frigate ram' ordered in the summer of 1862, was closer to the actual line of development and many thought her the best of all the Civil War designs. She was not finished, however, until the end of the war, too late to see service. The government turned her back to her builders who sold her to France. Under the name *Rochambeau* she long served in that navy, exercising an influence on French designers which was traceable for years in the exaggerated ram bows and tumble-home sides of their ships.[44] Of the monitors, at least one other crossed the Atlantic—*Onondaga,* also sold to France—while two more made the voyage around South America. These were *Catawba* and *Oneonta,* surreptitiously sold to Peru.[45]

Unfortunately for the monitor enthusiasts, the American taxpayer was losing interest in naval expansion. The four giant *Quinsigamonds* were not quite complete when the war ended; they were incontinently broken up on the stocks.[46] Of Ericsson's two big single-turrets, *Puritan* was first redesigned for two turrets on the insistence of the Navy Department and then left unfinished. *Dictator,* which broke down on the way to Fort Fisher, did not receive her new bearings in time to fight. She was recommissioned during the *Virginius* crisis with Spain in 1874 and got as far as Key West, but was scrapped a few years later. *New Ironsides* was accidentally destroyed by fire, in 1866, while lying at her dock. The three surviving *Winnebagos* were scrapped in 1874. *Saugus* was disposed of in 1891. But that still left five remaining members of the *Canonicus* class and the eight surviving *Passaics* on the Navy list.

In the meanwhile, the unfinished *Puritan* and the four *Miantonomohs* had been pursuing their weird subsequent career. Congress would appropriate no money for new ships, so the ingenious expedient was adopt-

[44] Bennett, pp. 348-354.
[45] Bennett, p. 627.
[46] Bennett, p. 400.

ed of 'repairing' these five. The 'repairs' consisted in breaking them up and building five new vessels around the old names. The business dragged on through various changes of design over a period of some twenty years, with the results finally emerging in the mid-'90's, just in time to lumber ineffectively through the Spanish-American War. The new *Puritan, Miantonomoh, Monadnock, Terror* (ex-*Agamenticus*), and *Amphitrite* (ex-*Tonawanda*) bore only slight resemblance to the originals. They were still recognizably monitors, but they had new turrets and modern rifles; all save *Miantonomoh* had steel superstructures and light caliber batteries between the turrets; they were equipped with comfortable wooden pilot-houses, and only the curses of the crews which had to suffer their discomforts and inefficiencies recalled the ships whose names they bore.[47]

When war came in 1898, however, the thirteen survivors of the *Canonicus* and *Passaic* classes were still virtually in their original condition, 15-inch smoothbores, 'grasshopper' engines[48] and all the rest. Their speed can scarcely have increased with the years and their laminated wrought-iron armor would not have withstood a contemporary shell of even modest caliber; but the Navy Department solemnly brought them forth, manned them with naval militia and set them to patrolling the harbors. A photograph of *Nahant* in the hands of the New York State Naval Militia shows her looking much as she must have done in the great days of the campaign against Charleston, except that a conical wooden penthouse surmounts her turret, with a kind of dormer window peering forward through which, presumably, the ship was conned.[49] Not long after the war she and the last of her consorts were disposed of.

The monitors had their many failings, but hardly as many as one might have expected of so untried and hastily developed a design. As the event proved, they did not swim in the main stream of naval progress, but they did the job for which they were intended under the conditions which obtained, and it is hard to say more for any naval type. Their primary mission, after all, was to counter Confederate Secretary Mallory's shrewd policy of using the new ironclad principle as a means of breaking the Federal supremacy at sea, and that mission they brilliantly performed. Like the giant sea-air fleets of the recent war, they also proved themselves pow-

[47] Bennett gives the history of all these ships; the dates of disposal are taken from his table in Appendix B.

[48] The Ericsson bell-crank engines deserve a paper to themselves. *Monitor* had a single cylinder casting, divided into two working cylinders by a steam-tight partition in the center, laid horizontally and athwartship. The two piston-rods, projecting to port and starboard, worked through a system of cranks and shafts on the single crank of the main shaft. While the Ericsson design seems quaint, there was a real reason for it—to keep the weights low and the machinery protected under the waterline.

[49] *Harper's Pictorial History of the War with Spain*, pp. 119, 214.

erful coadjutors in the blockade and against enemy coastal defenses; and if the future did not belong to them, neither can one be too sure that it belongs to the tremendous 'battle carriers' of today. The 'iron sea elephants' were the world's first real 'engineer' ships and they constituted its first true steam-and-iron navy. It seems a bit unfortunate that some of their names could not have been better remembered in the huge fleets developed for the second World War.

RECAPITULATION

The Federal ironclad fleet, 1861-1865, omitting the western river flotillas.

	1861	
New Ironsides	Broadside ship	Burned, 15 Dec. 1866
Galena	"	
Monitor	Single-turret	Lost, 30 Dec. 1862
	1862	
Passaic	Single-turret	
Montauk	"	
Catskill	"	
Patapsco	"	Mined, 5 Jan. 1865
Lehigh	"	
Sangamon (Jason)	"	
Camanche	"	Assembled in San Francisco
Nantucket	"	
Nahant	"	
Weehawken	"	Lost, 6 Dec. 1863
Keokuk	'Tower' ship	Sunk, 7 April 1863
Roanoke	Sea-going turret	
Onondaga	Double-turret	Sold to France
Miantonomoh	"	'Repaired'
Monadnock	"	"
Agamenticus (Terror)	"	"
Tonawanda (Amphitrite)	"	"
Winnebago	Eads double-turret	
Chickasaw	"	
Milwaukee	"	Mined, 28 Mar. 1865
Kickapoo	"	
Dunderberg	Broadside ram	Sold to France

Dictator	Single-turret	
Puritan	"	Redesigned; 'repaired'
Canonicus	Single-turret	
Catawba	"	Sold to Peru
Oneonta	"	"
Mahopac	"	
Manhattan	"	
Tecumseh	"	Mined, 5 Aug. 1864
Manayunk (Ajax)	"	
Saugus	"	
Tippecanoe (Wyandotte)	"	
	1863	
Quinsigamond	Double-turret	Unfinished
Passaconaway	"	"
Kalamazoo	"	"
Shackamaxon	"	"
20 *Yazoo* class	Single-turret, light draft	Failures

Subtracting the *Yazoos*, this is a total of 40 sea-going or coastal ironclads. Of these, 4 (*Galena, New Ironsides, Keokuk,* and *Dunderberg*) were broadside ships; 1 (*Roanoke*) was a high-freeboard turret, and 35 were of the monitor type. Of these 35 Civil War monitors only 3 were lost in action (*Tecumseh, Patapsco,* and *Milwaukee*) and 2 more (*Monitor* and *Weehawken*) by accident. None was ever seriously disabled by gunfire; indeed, in the whole course of the war only one man appears to have been killed by gunfire in the monitor fleet, though many were drowned in their sudden sinkings.

The 4 *Quinsigamonds* were never finished; *Onondaga, Catawba,* and *Oneonta* were sold abroad, leaving 23 monitors on the list. Five were 'repaired'; the 3 *Winnebagos* were sold in 1874; *Dictator* in 1883, and *Saugus* in 1891. The remaining 13 were still in existence at the time of the Spanish-American War. They were scrapped soon afterward.

The One Hundred and Fiftieth Anniversary Celebration of the Peabody Museum of Salem

BY WALTER MUIR WHITEHILL

ON 14 and 15 October 1949 delegates from more than seventy institutions, museums and learned societies, as well as several hundred local friends, gathered at the Peabody Museum of Salem to celebrate the one hundred and fiftieth anniversary of the foundation of the museum of the Salem East India Marine Society. The motives of this commemoration are set forth succinctly in the handsome invitation sent to participating institutions, which is reproduced herewith. The century and a half of continuous Museum operation—the longest on record in the United States—has been described in the history which I prepared for the occasion.[1] The purpose of this account is simply to preserve some of the details of the celebration itself.

As the first meeting of the Salem East India Marine Society had taken place on 14 October 1799, and as the present East India Marine Hall had been dedicated on 14 October 1825, the choice of Friday, 14 October 1949, for the opening of the commemoration was inevitable. Delegates arrived to register during the afternoon, and as the Museum was closed to the general public, there was an opportunity for those who were paying a first visit to Salem to examine the collections.

From five-thirty onward the delegates were the guests of the Salem Marine Society in its pent-house ship's cabin on the roof of the Hotel Hawthorne, and at seven o'clock they returned to East India Marine Hall where a long table—decorated with ship models, birds-of-paradise and East Indian booty—had been laid. In the centre, Augustus Peabody Loring, Jr., President of the Museum—elegantly flanked by a pair of great Chinese porcelain soup tureens in the form of geese, given to the East

[1] Walter Muir Whitehill, *The East India Marine Society and the Peabody Museum of Salem, A Sesquicentennial History* (Salem: Peabody Museum, 1949). xvi + 245 pages, illustrated. $5.00. This book, like the invitation to the anniversary celebration and all the Museum's publications in recent years, was designed by Mr. Fred Anthoensen, and printed at The Anthoensen Press, Portland, Maine.

India Marine Society in 1803[2]—dispensed a rum punch made according to the recipe brought from the West Indies at a similar time by his great-great-grandfather, Captain Joseph Peabody (1757-1844).[3] On his right Mayor Joseph B. Harrington, representing the Town [later City] of Salem, founded in 1629, and on his left Captain Samuel Eliot Morison, the delegate of Harvard College, founded in 1636, were seated, followed by the remaining delegates, in order of the foundation of their institutions, with trustees and officers of the Museum interspersed to act as hosts.

The dinner followed the traditional pattern of the annual feasts of the East India Marine Society in its earlier and more vigorous years, and though a shipmaster of 1800 might have been shocked by the small number of dishes on the menu, the oyster stew and the lobster were plentiful—and hot![4] One hundred and twenty-four years before, when the Hall was dedicated in the favoring presence of John Quincy Adams, President of the United States, no less than fifty-one toasts—'interspersed with appropriate music by the band'—were drunk,[5] but as such feats of prowess seemed beyond the capacities of the present day, the number for this occasion was prudently reduced to twelve. These, selected from toasts used at earlier dinners, were accompanied by the music traditionally associated with them, played by a three-piece orchestra.[6] Thus, when Captain Morison bawled out the toast to 'The Navy of the United States' the musicians supplied *Hull's Victory* as accompaniment—and the applause left no doubt that the United States Navy had friends in the room! The twelve toasts after dinner were:

1. By AUGUSTUS PEABODY LORING, JR., President of the Peabody Museum. The Mariners of Essex—and their tributes, in peace and in war, to the glory of their country.

   Originally proposed by John Quincy Adams, President of the United States, at the dedication of East India Marine Hall on 14 October 1825.

   Hail Columbia

[2] Reproduced in Whitehill, op. cit., plate opposite p. 16.

[3] For the recipe, see Augustus Peabody Loring, Jr., 'Mr. Joseph Peabody of Salem, Massachusetts, and His Punch,' THE AMERICAN NEPTUNE, II (1942), 39-43; also available in abridged reprint form from the Peabody Museum. Although Mr. Loring symbolically filled numerous glasses with Mrs. Joseph Peabody's ladle from one of the East India Marine Society punch bowls, the efficient waiters supplied by Mrs. Anna Sanders, the caterer of the evening, circulated silently with pitchers of Peabody Punch whenever their services were required.

[4] Thanks to electric stoves temporarily set up in the adjacent East Hall among the Polynesian collections! These had blown fuses at 5:30 P.M., in spite of special wiring, but were soon back in order without causing delay or tepid victuals.

[5] For the complete list, see Lawrence Waters Jenkins and Walter Muir Whitehill, *The Restoration of East India Marine Hall* (Salem: Peabody Museum, 1944), pp. 8-11.

[6] The music was under the direction of Ross Whittier of Haverhill, who often plays for Essex County square dances called by Joseph S. Perkins of East Boxford.

2. By STEPHEN WHEATLAND, President of the East India Marine Society.
The Salem East India Marine Society—the enterprise of its members forms a bright example for the imitation of the citizens of the United States.
Originally proposed by Hon. Aaron Hill on 14 October 1825.
Gen. Washington's March

3. By WALTER MUIR WHITEHILL, Historian of the Peabody Museum.
The memory of Washington—may his undeviating patriotism and integrity be ever imitated by the rulers and revered by the people of our nation.
Originally proposed at the East India Marine Society dinner in 1810.
Dead March in Saul

4. By HON. JOSEPH B. HARRINGTON, Mayor of Salem.
The ship of state and her pilots—may future times say of her what the present say of the Salem East India Marine Society, 'that she contains the best navigators that the world produces.'
Originally proposed by Hon. Josiah Quincy, Mayor of Boston, on 14 October 1825.
Constitution and Guerriere

5. By REV. EDWARD H. FINNEGAN, S. J., Delegate of Boston College.
Religion and learning—the only pillars on which can rest the edifice of a free government.
Originally proposed at the East India Marine Society dinner in 1811.
Life let us cherish

6. By SAMUEL ELIOT MORISON, Delegate of Harvard College.
The Navy of the United States. The guardian of the merchants' rights and the avenger of the nation's wrongs, may its march to eminence and power be undeviating and sure.
Originally proposed at the East India Marine Society dinner in 1816.
Hull's Victory

7. By LLOYD A. BROWN, Delegate of the Peabody Institute, Baltimore.
Christopher Columbus—may the enterprise which directed his steps never be extinguished in the country he discovered.
Originally proposed at the East India Marine Society dinner in 1810.
King of Prussia's March

8. By ALEXANDER C. BROWN, Delegate of the Mariners' Museum.
The mariner nerved and sinewed in the storm—'he dare do all that man dare.'
Originally proposed by Richard S. Rogers on 14 October 1825.
Life on the Ocean Wave

9. By LAWRENCE WATERS JENKINS, Director of the Peabody Museum.
The memory of the departed members of this Society.
Proposed at all dinners of the East India Marine Society.
German Hymn

10. By JAMES DUNCAN PHILLIPS, Delegate of the Colonial Society of Massachusetts.
The pioneers of the India Seas—to them we are greatly indebted for enterprise and skill—may we, as their descendants, imitate all that is valuable in their example.
Originally proposed by Jonathan P. Saunders on 14 October 1825.
Dance in the Forty Thieves

11. By CARLETON R. RICHMOND, Delegate of the Boston Athenæum.
The fair sex—liberty and life are but dreary things without the zest of their virtuous smiles.
Originally proposed at the East India Marine Society dinner in 1811.
Drink to me only with thine eyes

12. By WILLIAM C. WATERS, Delegate of the Salem Marine Society.
The day—may the festivities of our anniversaries be continued without diminution to members yet unborn.
Originally proposed at the East India Marine Society dinner in 1811.
Yankee Doodle

On the completion of these the floor was open for spontaneous tributes. John Otis Brew, Delegate of the Peabody Museum, Harvard University, proposed the health of the Salem curators; Richard H. Wiswall, Secretary of the Trustees of the Peabody Museum of Salem, countered with a toast to the delegates, which Adrian Digby, Delegate of the British Museum, gracefully capped with 'Our Hosts.' William H. Tripp, Delegate of the Old Dartmouth Historical Society, betrayed his whaling origins by proposing 'Greasy luck for the next 150 years.' Daniel J. Foley, Delegate of the Salem Chamber of Commerce, offered a well-deserved tribute to Lawrence Waters Jenkins, Director of the Museum, who has been associated with it for nearly a third of its life, and Stewart Mitchell, Delegate of the Massachusetts Historical Society, proposed the health of President Loring. There were, mercifully, no after-dinner speeches, and so on the conclusion of this graceful display of mutual politeness, the evening came to an end.

The following morning at 10:30 A.M. the delegates returned to East India Marine Hall for a meeting, at which the principal address was delivered by Lloyd A. Brown, Director of the Peabody Institute, Baltimore, who outlined the steps leading to the foundation and opening of that institution as a characteristic example of George Peabody's methods. I then gave a brief summary of the one hundred and fifty years of the East India Marine Society and Peabody Museum of Salem. After the meeting of the delegates, those who represented institutions founded or endowed

by George Peabody met briefly in the Director's office and laid plans for the establishment of an informal association, which it is hoped will serve as a useful means of communication between the museums, libraries and other charitable trusts that owe at least part of their support to the generosity of Mr. Peabody.

The delegates and their ladies lunched at Hamilton Hall in Chestnut Street by invitation of the Peabody Museum and the Salem Chamber of Commerce. After luncheon, Mayor Harrington of Salem spoke briefly and wittily, and invited Ralph Lawson, Vice President of the Peabody Museum, to give a short account of the history of the delightful and historic ballroom where the company was then assembled.

At 3:00 P.M. not only the delegates but some hundreds of invited guests assembled in East India Marine Hall for the largest meeting of the celebration. Mr. Loring presided. Greetings from the United States Government were presented by Lieutenant Commander L. H. McGovern, U. S. N. R., Commanding Officer of the United States Naval Reserve Training Base at Salem, and from the Commonwealth of Massachusetts by the Honorable William J. Landergan of Lynn, representing Governor Dever. Mayor Harrington again delighted the company by the skill with which he offered the good wishes of the city of Salem. Captain Morison then spoke on behalf of the delegates from institutions, and thanked the Museum for the entertainment offered. His only complaint was that a procession on the traditional pattern of East India Marine Society festivities of the early eighteen hundreds had not been included in the program. He lamented, with feeling, that the delegates had been deprived of the pleasure of seeing Mr. Loring dressed in the costume of a Chinese mandarin, reclining in the Indian palanquin that took so prominent a place in all East India Marine Society processions, and suggested that the Director and Assistant Director of the Museum, and the brothers James Duncan and Stephen W. Phillips would have made appropriate bearers. This would indeed have added to the pleasure of the celebration, although there is no telling what it might have done to traffic in Salem. The principal address was delivered by Vice Admiral Edward L. Cochrane, U. S. N. (ret.), Professor of Naval Construction and head of the Department of Naval Architecture and Marine Engineering at the Massachusetts Institute of Technology.

The formal exercises were kept to a minimum, as the number of invited guests outstripped the seating capacity of the hall, and many were obliged to stand. At the conclusion of Admiral Cochrane's address the meeting was adjourned, and tea and Peabody Punch were served.

In addition to the sesquicentennial history which was published on 14 October, two other Museum publications were issued to commemorate the anniversary: *A Handbook to the Collections of the Peabody Museum of Salem* by Ernest S. Dodge and Charles H. P. Copeland, which describes briefly the origin and highlights of the Ethnology, Maritime History and Natural History Departments of the Museum, and *A Catalogue of the Charles H. Taylor Collection of Ship Portraits in the Peabody Museum of Salem,* compiled by Lawrence W. Jenkins. A selection from the one hundred and fifty-six items of marine interest which were given to the Museum by the late Mr. Taylor, over a period of twenty years, was on display in the Marine Room during the celebration.

A series of 10½-inch dinner plates representing twelve Salem sailing vessels which was being manufactured in England by Messrs. Josiah Wedgwood and Son, Ltd., was unfortunately not completed in time for the anniversary celebration, although an announcement was made that the plates would be delivered not later than the summer of 1950. The design includes a decorative border with the seal of the Museum, a fouled anchor (the traditional device of the East India Marine Society), a view of East India Marine Hall, a compass rose, and the house flags of twelve Salem merchants. Twelve ships were chosen from the original paintings in the Peabody Museum, and have been hand engraved on copper for the centres of the plates.

The following delegates of institutions were present during the celebration:

1629 Town [later city] of Salem.	Mayor Joseph B. Harrington
1636 Harvard College.	Samuel Eliot Morison
1638 Harvard College Library.	William A. Jackson
1743 American Philosophical Society.	Elmer D. Merrill
1753 British Museum.	Adrian Digby
1766 Salem Marine Society.	William Crowninshield Waters
1780 American Academy of Arts and Sciences.	Frederick Haven Pratt
1780 Commonwealth of Massachusetts.	William J. Landergan
1790 Massachusetts Historical Society.	Stewart Mitchell
1800 First Naval District.	Captain C. H. Pike, USN
1807 Boston Athenæum.	Carleton R. Richmond
1812 American Antiquarian Society.	Samuel Eliot Morison
1820 Pilgrim Society.	Rose T. Briggs
1822 Maine Historical Society.	William H. Rowe
1822 Rhode Island Historical Society.	Clifford P. Monahon
1823 New Hampshire Historical Society.	Elmer M. Hunt

1830	Boston Museum of Science.	Maurice M. Osborne
1831	Yale University Art Gallery.	Alexander O. Vietor
1844	New England Historic Genealogical Society.	John William Farquharson
1846	Hakluyt Society.	Walter Muir Whitehill
1846	Smithsonian Institution and U. S. National Museum.	Remington Kellogg
1848	Essex Institute.	Russell Leigh Jackson
1852	Peabody Institute, Peabody.	James T. O'Neil
1852	Public Library of the City of Boston.	Lee M. Friedman
1852	Tufts College.	A. Warren Stearns
1857	Peabody Institute, Baltimore.	Lloyd A. Brown
1859	Museum of Comparative Zoology.	Elisabeth Deichmann
1862	Massachusetts Institute of Technology.	Vernon D. Tate
1863	Boston College.	Rev. Edward H. Finnegan, S. J.
1863	National Academy of Sciences.	Alexander Forbes
1866	Peabody Institute, Danvers.	George B. Sears
1866	Peabody Museum of Archaeology and Ethnology.	John Otis Brew
1866	Peabody Museum of Natural History.	Richard Swann Lull
1869	American Museum of Natural History.	Robert Cushman Murphy
1869	Boston University.	Robert E. Moody
1870	Museum of Fine Arts.	Edwin J. Hipkiss
1870	Metropolitan Museum of Art.	Vincent D. Andrus
1875	The Anthoensen Press.	Fred Anthoensen
1877	Old South Association in Boston.	George Gregerson Wolkins
1879	Bureau of American Ethnology, Smithsonian Institution.	William N. Fenton
1881	Bostonian Society.	Fitz-Henry Smith, Jr.
1884	Naval War College.	Comdr J. C. Shaw, USN
1887	Club of Odd Volumes.	Willard Goodrich Cogswell
1889	Brooklyn Museum.	Charles Nagel, Jr.
1892	Colonial Society of Massachusetts.	James Duncan Phillips
1893	American Folklore Society.	Horace P. Beck
1894	Nantucket Historical Association.	Edouard Stackpole
1894	Oriental Institute of the University of Chicago.	Robert J. Braidwood
1896	Worcester Art Museum.	George L. Stout
1898	Walpole Society.	Chauncey C. Nash
1902	American Anthropological Association.	Horace P. Beck
1903	Old Dartmouth Historical Society.	William H. Tripp
1904	John Carter Brown Library.	Robert W. Kenny

1912	Ropes Memorial.	Albert E. Cole
1914	Salem Chamber of Commerce.	Daniel J. Foley
1921	Francis Hart Nautical Museum, M. I. T.	Vice-Adm. E. L. Cochrane
1924	Isabella Stewart Gardner Museum.	Francis Lee Higginson
1926	Naval Historical Foundation.	Capt. Charles Bittinger, USNR
1927	Robert Abbe Museum.	Wendell S. Hadlock
1928	John Woodman Higgins Armory.	John W. Higgins
1928	New England Quarterly.	Bernard De Voto
1929	Currier Gallery of Art.	Gordon M. Smith
1929	Marine Historical Association, Inc.	Alexander O. Vietor
1930	Addison Gallery of American Art.	Bartlett H. Hayes, Jr.
1930	Fruitlands and the Wayside Museums.	William Henry Harrison
1930	The Mariners' Museum.	Alexander C. Brown
1935	United States Coast Guard Station, Salem.	Lt.-Comdr. E. E. Fahey, USCG
1936	Brick Store Museum.	Mrs. Clarence S. Williamson
1936	Penobscot Marine Museum.	Ralph Whittier
1937	National Gallery of Art.	Perry B. Cott
1938	Salem Maritime National Historic Site.	Edwin W. Small
1940	The American Neptune.	D. Foster Taylor
1947	First Ironworks Association, Inc.	J. Sanger Attwill
1948	U. S. Naval Reserve Training Center, Salem.	Lt.-Comdr. L. H. McGovern, USNR
1949	Collection of Historical Scientific Instruments, Harvard University.	David P. Wheatland

In addition, delegates were appointed by the George Peabody College for Teachers (Henry W. Hill), Chicago Historical Society (H. Maxson Holloway), New York Historical Society (Fenwick Beekman) and the Sjöfartsmuseum in Stockholm (Count Pehr Sparre), who were at the last moment unable to attend.

Greetings by cable were received from the Trustees and Staff of the National Maritime Museum, Greenwich, and the President and Members of the Society for Nautical Research. Other friendly messages were sent by the Musée de la Marine in Paris, the Nederlandsch Historisch Scheepvaart Museum in Amsterdam, the Henry E. Huntington Library and Art Gallery, the Chicago Natural History Museum, the Southwest Museum, the Institute of Early American History and Culture, Williamsburg, the National Museum of Canada and the Nova Scotia Museum of Science.

A model of an outrigger canoe from the Polynesian atoll of Kapingamarangi arrived from Honolulu as a gift from the Bernice P. Bishop Mu-

Model of a Polynesian outrigger canoe, made by King David of the atoll of Kapingamarangi, Caroline Islands, given to the Peabody Museum of Salem on its one hundred and fiftieth anniversary by the Bernice P. Bishop Museum

THE PRESIDENT AND TRUSTEES OF THE PEABODY MUSEUM OF SALEM TO

Greeting:

In the autumn of 1799 a group of Salem shipmasters, experienced in the navigation of the seas beyond the Cape of Good Hope and Cape Horn, joined together to form the Salem East India Marine Society, an organization designed for sociability, the relief of the needy, the accumulation of information regarding navigation and the collecting of "natural and artificial curiosities" from the distant countries visited by these intrepid seamen. To the museum founded by this society were given at an early date objects from Oceania which illustrate the native cultures of Polynesia, Micronesia and Melanesia in their purest form, and in 1825 East India Marine Hall was built by the society to house its treasures fittingly. When, through the decline of Salem's foreign trade, the vigor of the East India Marine Society was waning, the future of its museum was assured through the generosity of George Peabody of London. To its earlier possessions have been added collections illustrating the culture of Japan, the natural history of Essex County and the maritime history of Salem. Although other museums were founded in the United States before 1799, none other has so long a record of continuous operation.

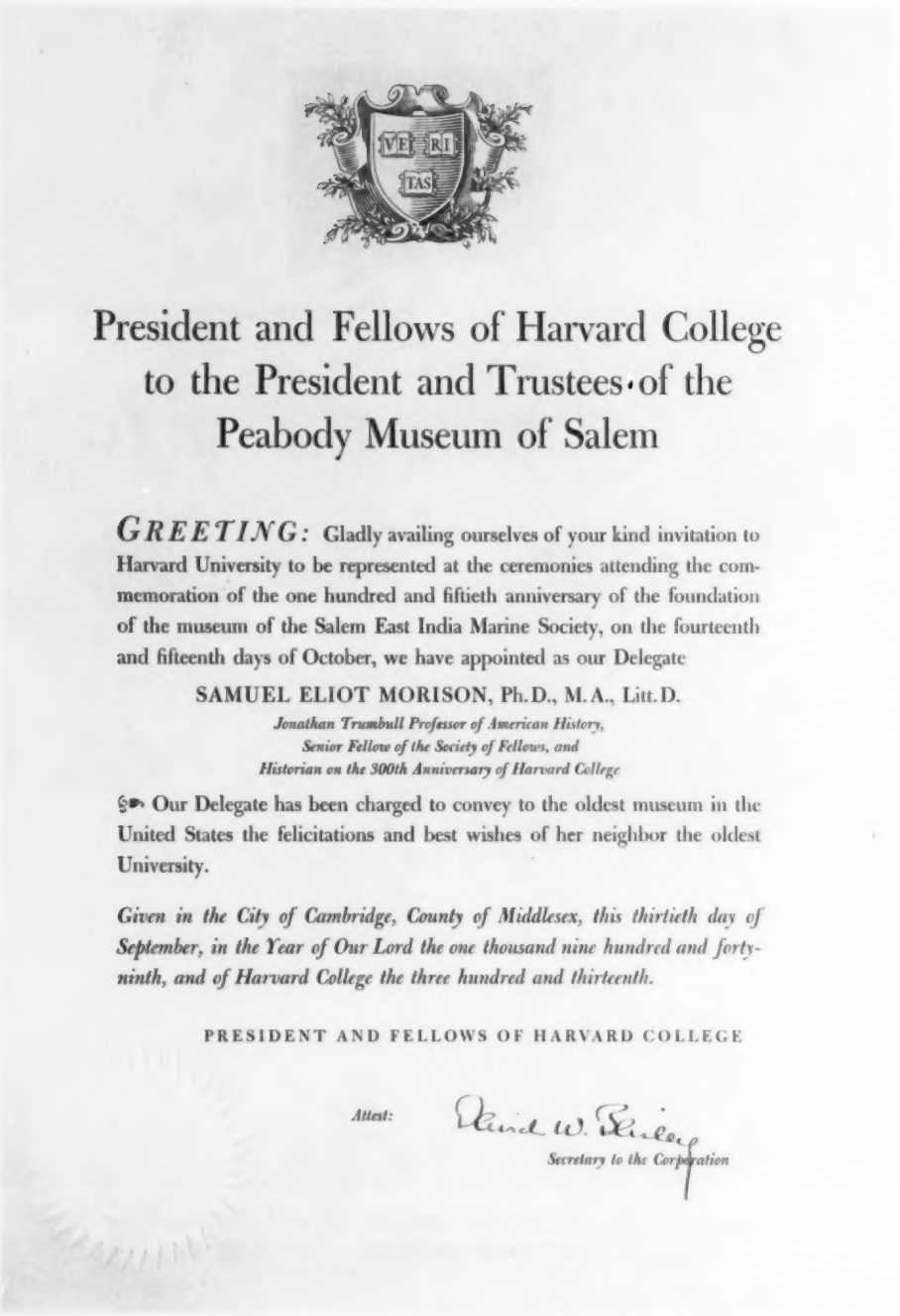
Invitation to the one hundred and fiftieth anniversary of the Peabody Museum of Salem sent to institutions

WHEREFORE, we request the favor of your participation in the festivities and ceremonies attending the commemoration of the one hundred and fiftieth anniversary of the foundation of the museum of the Salem East India Marine Society, to be held in East India Marine Hall, Salem, Massachusetts, on the fourteenth and fifteenth days of October, nineteen hundred and forty-nine. If it be that you will so honor us, we ask that we may be apprized of the name of your Delegate, whom we shall gladly welcome.

Given at the Peabody Museum, in the City of Salem, County of Essex and the Commonwealth of Massachusetts, this tenth day of September, nineteen hundred and forty-nine.

President

Invitation to the one hundred and fiftieth anniversary of the Peabody Museum of Salem sent to institutions



President and Fellows of Harvard College to the President and Trustees of the Peabody Museum of Salem

GREETING: Gladly availing ourselves of your kind invitation to Harvard University to be represented at the ceremonies attending the commemoration of the one hundred and fiftieth anniversary of the foundation of the museum of the Salem East India Marine Society, on the fourteenth and fifteenth days of October, we have appointed as our Delegate

SAMUEL ELIOT MORISON, Ph.D., M.A., Litt.D.
Jonathan Trumbull Professor of American History,
Senior Fellow of the Society of Fellows, and
Historian on the 300th Anniversary of Harvard College

Our Delegate has been charged to convey to the oldest museum in the United States the felicitations and best wishes of her neighbor the oldest University.

Given in the City of Cambridge, County of Middlesex, this thirtieth day of September, in the Year of Our Lord the one thousand nine hundred and forty-ninth, and of Harvard College the three hundred and thirteenth.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Attest: Paul W. Fierce
Secretary to the Corporation

Acceptance from the President and Fellows of Harvard College of the invitation to the one hundred and fiftieth anniversary of the Peabody Museum of Salem

seum, accompanied by a graceful message from Sir Peter Buck, President of the Trustees, which concluded: 'This canoe will make an aerial voyage from the Pacific to Salem, and in its hold it will carry this our greeting.' The model, which is reproduced herewith, was made by King David, who, besides exercising royal authority over Kapingamarangi (south of Truk in the Caroline Islands and less than two degrees north of the Equator), is also a master craftsman.

A large group of Polynesian objects, as well as log books and manuscripts relating to the Pacific, were given in commemoration of the anniversary by Lawrence Waters Jenkins from his private collection. This gift included two Fiji clubs collected by the Wilkes Exploring Expedition, unpublished documents relating to the wreck of the Salem ship *Glide* in the Fijis in 1831, and logs of Captain Allen Pitman, a Marblehead, who crossed the path of Bully Hayes, the last of the South Sea pirates.[7]

Another anniversary gift recalling the turbulent past of the Pacific came from Miss Martha Elizabeth Driver of Marblehead—a porringer made from the bronze pump of H.M.S. *Bounty,* which was given to Captain William Driver (1803-1886) by Pitcairn Islanders whom he had befriended.[8]

A large lacquer box, presented to Commodore Perry by the Emperor of Japan, was given by Mr. and Mrs. Francis B. Lothrop, and Mr. and Mrs. Willard C. Cousins gave a buckskin beaded Comanche-Kiowa shirt.

From the Museo Naval in Madrid came a medal commemorating the centenary of that institution, which took place in 1943, and from the National Maritime Museum a copy of *The Queen's House, Greenwich,* by George H. Chettle. Monsieur Philipp Keller sent four photographs of ship paintings, and Dr. Vernon D. Tate presented a manuscript log of the United States razee *Guerriere* of the years 1818-1819.

Among the many expressions of goodwill and evidences of friendship received during the anniversary, none gave greater pleasure than the letter from Sir John Forsdyke, Director of the British Museum, transmitting the congratulations of the Trustees and Staff of that institution, which concluded: 'Although the Marine Society's Museum may not have been

[7] See Lawrence W. Jenkins, 'A Marbleheader Meets the Last of the South Sea Pirates,' *Proceedings of the Massachusetts Historical Society,* LXVI (1936-1941), 254-269.

[8] In the early eighteen thirties, Captain Driver, commanding the brig *Charles Doggett,* found at Tahiti sixty-five perons whom the British government had recently transported thither from Pitcairn Island. Learning that they were unhappy in Tahiti and extremely anxious to return to Pitcairn, Captain Driver took them back. The pump, and a testimonial letter, were presented to him for his kindness in doing so. For a sketch of Captain Driver and reproduction of his portrait, see Walter Muir Whitehill, *Portraits of Shipmasters and Merchants in the Peabody Museum of Salem* (Salem: Peabody Museum, 1939), pp. 39-41.

the earliest foundation in the United States, its ethnographical collections were probably the first in the world to be assembled for comprehensive scientific study in the modern sense. To our admiration of your distinguished record we may add our pride and gratitude in sharing with you in some degree the honours, and in large measure the munificence, of that great citizen of Massachusetts, George Peabody.'

A Footnote on Massachusetts' Deserters who went to Sea during the American Revolution

BY ARTHUR J. ALEXANDER

OFF to a slow start in Massachusetts, privateering quickly 'caught on' and before long the rage for it was as great there as anywhere. 'Vast numbers' were employed 'in that way.'[1] With limited manpower, ever increasing Continental quotas to be met and public vessels of war to be manned, the Commonwealth was hard put to meet the needs of the home front, let alone satisfy the insatiable demands of the privateer service for additional men. This study therefore proposes to deal with certain phases of one source of these men—the deserter from Massachusetts' armed forces during the American Revolution.

The problem of the deserter who went to sea, either to escape detection and punishment or gain a fortune, was by no means that of the Bay State alone.[2] Every colony which had free access to the sea was confronted with the problem; even the detested enemy could not keep his deserters from stealthily slipping out to sea.[3] The only difference was that certain

[1] *Warren-Adams Letters* (Boston, 1917-1925), I, 181-186. James Warren to John Adams, 14-15-16 November 1775. 'You know we have not practised privateering so much here as they have in some of the other colonies.' Ibid., II, 438-439. James Warren to Samuel Adams, 15 August 1776. 'The Spirit of Privateering prevails here greatly.' New York, New York Public Library. *Sam Adams Papers*, Ms., James Warren to Samuel Adams, 15 August 1776, p. 2. *Familiar Letters of John Adams and his wife Abigail Adams, during the Revolution*. With a Memoir of Mrs. Adams by C. F. Adams (New York: Hurd and Houghton, 1876), pp. 229-230. Abigail Adams to John Adams, 29 September 1776. 'The rage for privateering is as great here as anywhere. Vast numbers are employed in that way.'

[2] (Philadelphia) *Pennsylvania Packet, or the General Advertiser*, 27 May 1779. Advertisement seeking Peter Dominick, a deserter, 'supposed to be gone on board the Hunter privateer at Philadelphia.' Ibid., Advertisement seeking James Berry and James Reynolds, deserters, 'supposed to be gone to sea.' A. J. Alexander, 'Desertion and its Punishment in Revolutionary Virginia,' *The William and Mary Quarterly, Third Series*, III (1946), 396. W. W. Hening, ed., *The Statutes at Large: being a Collection of all the Laws of Virginia from the First Session of the Virginia Legislature. . .* (Richmond, 1810-1823), X, 263-267. T. Cooper, ed., *The Statutes at Large of South Carolina* (Columbia, S. C., 1836-1873), IV, 410-413. Resolve of 12 April 1776. Journal of the Provincial Congress at Halifax, N. C., in W. L. Saunders, ed., *The Colonial Records of North Carolina* (Raleigh, N. C., 1886-1890), X, 511. Rhode Island, *Acts and Resolves*, Session September 1779, p. 11. P. Force, comp., *American Archives: Fifth Series* (Washington, D. C., 1837-1853), II, 622. Colonel Henry B. Livingston to Governor Trumbull, 30 September 1776. '. . . but the desertion of several of my men, who are supposed to be gone for New London, in order to engage on board the privateer fitting out for that place. . . .'

[3] *The* (New York) *Royal Gazette*, 25 August 1779. Advertisement seeking Thomas Pulham, a deserter from the Horse Department of the Royal Artillery. 'It is believed he is gone on board some

colonies, Massachusetts in particular, suffered more in this respect than others with the result that harsher and ever more punitive legislation was required to cope with the problem.

From first to last, the privateer service furnished effective competition for the Continental recruiting officers.[4] Bitter and repetitious, indeed, were the constant complaints hurled against those privateersmen who so shortsightedly deprived both the Line and the Continental Navy of needed manpower.[5] The irony of the situation was that many of the men who succumbed to the lure of the recruiting officer would sooner or later skip the public service for that of the competing privateersmen.

The Massachusetts Line was obliged to wait two full years after Lexington and Concord before anything was done to abate the competition of the privateersmen.[6] It was one thing to punish a deserter after his safe return from a highly successful cruise. On the other hand, it was downright mockery for the same deserter to be permitted to retain his share of a prize he had helped capture while absent from his bounden duty.[7]

The initial measure which took the form of a Resolve therefore was not intended to increase the physical punishment meted out to a deserter,

privateer, or concealed for that purpose.' Also see advertisement seeking Thomas Silk and two other deserters. Ibid., 12 June 1779. Four negro 'Labourers in the service of the Royal Artillery' deserted the Virginia Company of Blacks for the same purpose. Advertisement seeking Toliver Pearce and three others. Ibid., 24 February 1779.

[4] Force, comp., *American Archives: Fifth Series,* III, 872. General Charles Lee to the New Hampshire Council, 27 November 1776. '. . . the officers (and indeed it must necessarily be so) are of opinion that nothing impedes the recruiting of the Army so much as the present rage for privateering.' General Nathanael Greene to Governor Cooke, 4 December 1776. Ibid., III, 1071-1072. 'I wish the inlisting may go on favourably; but I fear the contrary. The success of privateering has set all the troops distracted.' Benjamin Rush to Richard H. Lee, 21 December 1776. Ibid., III, 1512-1513. '. . . the four Eastern States will find great difficulty in raising their quota of men, owing to that excessive rage for privateering, which now prevails among them.' 'Quere, Whether it is probable that the Town of Boston will ever compleat their quota of Men for the Army, while Privateers are continually opening their Rendezvous and picking up the very Men who are most likely for this Business?' *The Boston Gazette, and the Country Journal,* 9 April 1781.

[5] G. W. Allen, 'Captain Hector McNeill, Continental Navy,' *Proceedings of the Massachusetts Historical Society,* LV (1921-1922), 76-78. Captain Hector McNeill to the Council of Massachusetts, n.d., probably January 1777. Captain McNeill to the Council of Massachusetts, 30 January 1777. Ibid., 78-79. Difficulty of obtaining men to man a brig. Massachusetts, *House Journal,* 1779, p. 183. Entry for 17 April 1779. '. . . that he cannot obtain Men sufficient to man said Brig (the *Hazard*), and praying he may be permitted to haul her up and refit her.' 'Stray leaves from an Autograph Collection, Correspondence of Josiah Bartlett of N. H. during the American Revolution.' *The Historical Magazine,* First Series, VI (1862), 75-76. '. . . but had there been no privateers is it not probable there would have been a much larger number of Public Ships than has been fitted out.' G. W. Allen, *A Naval History of the American Revolution* (Boston: Houghton, Mifflin Co., 1913), I, 48.

[6] According to the Massachusetts Archives the first legislation dealing with the problem was not enacted until 7 April 1777. According to the Legislative Records of the Council the correct date is 26 March 1777. *The Acts and Resolves, public and private, of the Province of Massachusetts-Bay* (Boston, 1869-1922), XIX, 864.

[7] Petition of Lieut.-Col. Paul Revere submitted to the Massachusetts General Court. Ibid., XXI, 98-99. 'Your Petitioner begs leave to represent to the Honorable Court, that several of his men have deserted and gone in Privateers and are now upon a Cruise, that one of them has sent in a Valuable Prize.'

rather to deprive him of his share of prize money.[8] If the cash nexus were only eliminated perhaps fewer men might be tempted to flee the armed forces.[9]

This Resolve, however, does not seem to have accomplished its purpose; desertion to the privateer service continued apace. If a deserter were at all averse to incurring any risk on board a privateer he could still take his chances on board some outbound merchantman. In any event something more drastic than merely depriving a man of his share of prize money was needed to deter would-be deserters from slipping off to sea.

Perhaps self-interest on the part of some members of the Massachusetts House, more interested in the success of their own ventures than in preventing deserters slipping on board privateers can account for the failure of the legislature speedily to enact a new and more drastic measure.[10] That this may well have been the case is evidenced by what happened early in 1778 when a more comprehensive as well as more punitive measure was prepared for submission to the House. Broadened to include deserters from the Continental navy and also intended to cover the cases of men who stowed away on board merchantmen, the proposed resolution ground to a sudden and unexplained halt somewhere along a tortuous legislative channel and was thereafter heard of no more.[11] Unfortunately, men who made up their minds to skip the public service had not the least intention of staying put during the time the General Court

[8] Ibid., XIX, 864. 'Resolves authorizing private vessels of war, and forbidding enlisted soldiers to serve therein.' Resolves, Chap. MI, Second Sess., 1776-1777.

[9] Petition of Lieut.-Col. Paul Revere submitted to the Massachusetts General Court. Ibid., XXI, 98-99. 'He therefore prays that the Honorable Court would take the Matter into consideration and pass such an Act as will hinder them from recovering their Wages or prize Money that they may have no inducement to Desert.'

[10] A. F. De Koven, *The Life and Letters of John Paul Jones* (New York: C. Scribner's Sons, 1913), I, 124. '. . . I am informed, and I have reason to believe it to be too true, that even some of the Gentlemen appointed to fit out the new frigates, are concerned in privateers, and not only wink at, but encourage and employ deserters from the Navy.' 'Stray leaves from an Autograph Collection,' *The Historical Magazine*, First Series, VI (1862), 75-76. 'Those people who have the most influence with Seamen think it their interest to discourage the Public service, because by that they promote their own interest, viz, Privateering.'

[11] A Resolve of this character was prepared for submission to the House in February 1778. *Acts and Resolves*, V, 1246. It well may be that this Resolve was prepared in answer to information furnished the House 'that a Number of Soldiers belonging to the Continental Army had entered on board Privateers in the Harbour of Boston.' Massachusetts, *House Journal*, 1778, p. 196. Entry for 27 February 1778. A most careful examination of G. W. Allen, 'Massachusetts Privateers of the Revolution,' *Collections of the Massachusetts Historical Society*, LXXVII (1927), discloses that only three bonds were ever given which specifically bound their obligors not to 'enlist soldiers of the Continental Army.' These three bonds were all executed in the first quarter of the year 1778. *'Batchelor'* 26 February (p. 77); *'Hornet'* 6 March (facing p. 180); and *'Minerva'* 3 April (p. 221). No specific legislation requiring the issuance of these special purpose bonds has been found. Even the Council Records which contain the Executive Proceedings of the Council for the months in question is silent upon this point. Boston, Secretary of the Commonwealth, Massachusetts Archives, *Council Records, 1778, Ms.* The then current requirement for the issuance of commissions to privateers was upon 'complying with the Resolves of Congress.' Ibid., pp. 77, 85, 103-104, 135, 137.

temporized; they merely packed their belongings and went their merry way.

Another year rolled by, it was now 1779, Lexington and Concord had passed into history and yet the problem of the deserter from the public to the privateer service, or for that matter of the man who illegally switched from the Continental army to the Continental navy was as unsolved as ever. Be that as it may, even though the Representatives might have pigeon holed the matter for the time being, the Council, at least, showed some willingness to handle one phase of the problem, that of the men who fled the Continental or Massachusetts Navy.[12] All in all, of what earthly use were men-of-war if men were lacking to man the vessels? Serious as the problem had by now become still another mark must be chalked up against the General Court on the score of legislative inaction.[13] But the problem would not down and it was only a matter of weeks before the Council was confronted with a petition from Paul Revere, the Boston silversmith become commanding officer of the state's train of artillery.[14] Colonel Revere was forced to declaim upon the futility of recruiting men for the train 'if the marine officers, may take them from us.'

What had happened was that some of the Colonel's matrosses had been discovered on board the Continental frigates *Providence* and *Boston*.[15] Stung to action the Council ordered their return to the Colonel or 'to such officer as he shall appoint to Receive them.' Should the master of either *Boston* or *Providence* fail to comply with the Council's mandate he was in effect forbidden to go to sea.

It was the Council rather than the House which now peremptorily, if only belatedly, took steps to curb the continuing evil. Losing no time that body confronted the House at the next session of the General Court with a series of resolutions, the purport of which was to reinforce the existing legislation and at the same time prevent the enlistment, nay, even the entry of deserters, State or Continental, on board armed vessels.[16] The result, after the usual legislative give and take, was enactment of a new and more drastic 'Act to prevent Deserters from the American Troops entering on board ships of War.'[17]

[12] *Acts and Resolves*, V, 1246. Massachusetts, *House Journal*, 1779, p. 87. Message from the Massachusetts Council to the House of Representatives, 6 January 1779.

[13] Although the Council's 'Recommendation to prevent the seducing Seamen from the public Service' was referred to a select committee for careful consideration no action seems to have been taken by that committee. Massachusetts, *House Journal*, 1779, pp. 90-91. Entry for 8 January 1779.

[14] *Acts and Resolves*, V, 1246. Petition submitted by Lieut.-Col. Paul Revere to the Honorable Council, 27 March 1779.

[15] Ibid.

[16] Ibid., 1247.

[17] Ibid., 1075-1076. Laws, Chap. IX, First Sess., 1779-1780.

Heretofore, efforts to curb desertion had been directed against the individual deserter himself. Mere legislative fiat, as has been seen, that a deserter forfeit his share of prize money to the Commonwealth seems to have failed of its purpose. To decree that a deserter be deprived of his share of prize money was one thing, to actually gain possession of the money itself for the Commonwealth once it had been paid over was something altogether different. The prime difficulty lay in the fact that there was nothing to prevent a prize agent from paying a deserter his share of prize money.[18] It is true that the Resolve of April 1777 authorized the recovery of forfeited prize money 'in any Court proper to try the same' but this was no guaranty that a deserter would in fact be deprived of his share of prize money.

Something had to be done to plug this loophole and something was indeed done. A deserter continued to forfeit his share of prize money which accrued to the use of the Commonwealth as before but prize agents were now debarred from paying it to deserters who were entitled to it.[19] Similarly, dividends of prize goods which might have been earned were ordered turned over to the Massachusetts Board of War.

Equally important was the change manifest in the new attitude adopted by the General Court toward a captain and his officers on board armed vessels. Perhaps a sufficiently heavy fine levied against these officers might serve as a deterrent to their shipping crews composed of men already in the service of the State or Continent.

The newly adopted 'Act to Prevent Deserters . . .' went even further than that. After all, masters and other chief officers on board ships were not in the habit of themselves seeking their own crews. This service was usually performed by small fry, the mates, water-front crimps and the like. Even these came within the purview of the new Act, but whereas captains and other chief officers were subjected to a £500 fine, these lesser gentry were obliged to 'forfeit and pay a sum not exceeding five hundred pounds nor less than fifty pounds' should they too be concerned in hiring deserters to go on board armed vessels.[20]

But continue to go to sea on board armed vessels deserters did, a fact of which Colonel Thomas Marshall and his fellow officers of the Third and Fourth Massachusetts brigades in the Continental service soon found it

[18] Ibid., XIX, 864. 'Resolved that if any Person or Persons ship themselves and proceed in any such Armed Vessel after having inlisted themselves into the Continental Army, he or they shall forfeit to the use of this State all their share of any Prize or Prizes that may be taken by such Armed Vessels during their Cruize or Cruizes to be recovered in any Court proper to try the same.'

[19] Ibid., V, 1076. Laws, Chap. IX, Sect. 5, First Sess., 1779-1780.

[20] Ibid., 1075. Laws, Chap. IX, Sect. 1-2, First Sess., 1779-1780.

necessary to remind the General Court.[21] All the General Court could do in answer to their memorial was to resolve that the 'Act to prevent Deserters from the American troops' be published three successive weeks 'in all the Boston Thursday's news-papers, and in the Worcester newspaper.'[22] Action on other suggestions included in the memorial which were intended to curb desertion was postponed to a future sitting of the General Court.[23] Deserters from the armed forces, however, seem to have failed either to read or heed the published announcments admonishing the public that 'an Act to prevent Deserters from the American Troops' was the law of the land or that the Act really meant what it said. Once again a loophole had been uncovered.

Now that the Commonwealth could lay its hand upon a deserter's share of prize money or prize goods, who was to notify the public authorities or prize agents that a prospective claimant had in fact fled the armed forces and therefore was in no position to lay claim to his share? The solution was simple, the Commonwealth should have assumed that burden. But no, another expedient was hit upon. Why not have recourse to the common informer? A promise of 'one moiety of all dividends of prize-goods and shares of prize-money' that might accrue to a deserter turned privateersman might tempt a friend, surely a foe, to betray him to constituted authority.[24] Again, the common informer usually was in an excellent position to know whether privateersman John Doe was in fact John Doe, or an alias assumed by Richard Roe, an erstwhile friend and a deserter from the Massachusetts armed forces.[25]

Still the problem remained unsolved. In May 1780 and again in November 1781 after the surrender of Cornwallis, legislative fears continued to persist that 'many deserters may escape, on board armed ships and other vessels sailing from this state as seamen or otherwise.'[26] It was this continuing, haunting fear, if not actual desertion, which led the General Court once again to amend and strengthen the legislation it had already enacted.[27]

[21] Ibid., 1247.

[22] Ibid., XXI, 223. Resolves, Chap. CDLXXIII, Second Sess., 1779-1780. *The* (Boston) *Continental Journal, and Weekly Advertiser,* 14 October 1779. *The* (Boston) *Independent Chronicle. And The Universal Advertiser,* 21 October 1779.

[23] *Acts and Resolves,* V, 1247.

[24] Ibid., XXI, 258. Resolves, Chap. DXLIX, Third Sess., 1779-1780.

[25] On the basis of approximately 1200 known Massachusetts deserters 22 or nearly two per cent enlisted under assumed names.

[26] *Acts and Resolves,* V, 1198-1201. Laws, Chap. XLVIII, Preamble Sect. IV, Fourth Sess., 1779-1780. *Acts and Laws of the Commonwealth of Massachusetts, 1780-1781* (Boston, 1890), pp. 538-541.

[27] Ibid., Preamble. 'Whereas the Acts already made and passed for apprehending and securing Deserters from the Continental Army, are found to be insufficient to answer the Purposes for which they were designed.' This statute was enacted 2 November 1781.

Once again the master of an armed vessel was made personally liable should he be so brash as to include, knowingly, deserters among his crew. But whereas the current penalty for this offense was limited to a £500 fine for each deserter carried off, it was thenceforth tripled and became 'a fine not exceeding fifteen hundreds pounds, nor less than five hundred pounds.'[28] At that, a guilty commander was getting off cheaply because the original bill set a £5000 maximum and a £3000 minimum.[29]

Now for the first time a new and positive burden was thrust upon the master of an armed vessel. Each master was obliged to prepare and file in the Naval Office of his port of departure a sworn list descriptive of his entire crew, officers as well as men.[30] At the same time his list must lay bare the 'shares or parts of shares which had been allotted each man included in it. Should a master fail, either to prepare his list or submit it to the proper officer, he would then incur the precise penalty he would have incurred had he knowingly shipped a deserter in the first instance.

Upon receipt of this list a naval officer was required to send it without delay to the Council at Boston for scrutiny and approval.[31] In the event that a crew manifest did disclose the name of a man who had fled the Commonwealth's forces, that fact was perforce noted alongside his name. Should, however, this notation be disregarded by a prize agent and payment of prize money or delivery of prize goods made, then the guilty agent became personally 'accountable to the treasurer of this state (Massachusetts) . . . for the share or shares, or parts of shares, so paid, delivered or distributed' and in addition 'also forfeited a sum of money not exceeding fifteen hundred pounds, nor less than five hundred pounds.'[32]

One link yet remains to be forged in the ever expanding chain whereby the Commonwealth sought to enmesh those of its deserters who sought refuge on board ships. This link, purely technical, concerned the scanning of crew manifests for deserters and involved the transfer of the Council's sole authority to scan such lists to the Governor acting in conjunction with the Council. This change was not, however, made until after the reorganization of the state government consequent upon the adoption of the new constitution in the spring of 1780.[33]

The recital of the details involved in the several steps taken by the Commonwealth in its efforts to stamp out desertion from its armed forces

[28] *Acts and Resolves,* V, 1199. Laws, Chap. XLVIII, Sect. 4, Fourth Sess., 1779-1780.
[29] *Acts and Resolves,* V, 1373.
[30] Ibid., 1199. Laws, Chap. XLVIII, Sect. 5, Fourth Sess., 1779-1780.
[31] Ibid., Sect. 6.
[32] Ibid., Sect. 7.
[33] *Acts and Laws, 1780-1781,* pp. 538-541. This change was not made until 2 November 1781.

to the privateer service is now complete. It may now be of interest to say something about some of the men at whom these increasingly punitive measures were aimed. Interesting, although meager, data is revealed in advertisements seeking deserters which were published in contemporary Massachusetts newspapers.

As a general rule 'wanted' advertisements paid little or no attention as to the whereabouts of the men sought. One deserter was 'last heard of on board Capt. Burk's privateer.'[34] A second man was 'supposed to be gone to Newbury, to join a privateer, that is fitting out for no purchase no pay.'[35] Two others were supposed to have shipped on board privateers, one of whom was already believed at sea.[36] There are also advertisements seeking men who were supposed to have already shipped or in fact actually were on board armed vessels, other than privateers.[37] One advertisement of this character which sought more than a score of men who had fled Colonel Glover's regiment made no bones of the fact that 'Many of the above-named Persons have shipped on board armed Vessels, without Orders.'[38]

With the knowledge that some deserters might seek to ship on board privateers, masters of privateersmen were cautioned against shipping deserters.[39] Such advertisements were not necessarily addressed to masters of privateers alone. Thus where one advertisement might be addressed to 'Captains of Privateers and Merchantmen' another might call upon 'Masters of Vessels' or even 'Captains of Vessels' to do their duty.[40] Several advertisements even went one step further and warned masters about the penalty they might incur should they conceal or carry off deserters.[41]

[34] *The* (Cambridge) *New-England Chronicle: or, The Essex Gazette*, 29 February 1776. Advertisement seeking John Sharp, a deserter, from Capt. Samuel Gilbert's company, Colonel Prescott's regiment.

[35] Ibid., 8 February 1776. Advertisement seeking Jeremiah Whitum, a deserter from Capt. Samuel Sayer's company, Colonel Patterson's regiment.

[36] John Leach was 'supposed to be on board one of the privateers.' *The* (Boston) *New-England Chronicle*, 15 August 1776. Allen Hovey was 'supposed to be bound, in a Privateer, to Sea.' *The* (Boston) *Independent Chronicle. And The Universal Advertiser*, 9 October 1777.

[37] Advertisement seeking Mark Barns and Nathaniel Lankester, deserters from Captain Allen's company, Colonel Bailey's regiment. Ibid., 15 May 1777. Barns was 'supposed to be on board Capt. McNeil's Ship' while Lankester was believed 'On board Commodore Manly's Ship.'

[38] *The* (Boston) *New-England Chronicle*, 15 August 1776. 'N.B. Many of the above-named Persons have shipped on board armed Vessels, without Orders.'

[39] Ibid., 'It is hoped no Officer will encourage them when he knows them to be Deserters.'

[40] Col. Henry Jackson's adjutant warned 'Captains of Privateers and Merchantmen . . . not to conceal or carry off any of the above Deserters.' *The Boston-Gazette, and Country Journal*, 22 September 1777. Capt. Seth Drew also cautioned 'All Masters of Vessels . . . against harbouring, concealing or carrying off said Deserters.' *The* (Boston) *Independent Chronicle. And The Universal Advertiser*, 18 September 1777. 'All Masters of Vessels' were forbidden to carry off John Williams, a deserter, from Colonel Alden's regiment. *The* (Boston) *Continental Journal, and Weekly Advertiser*, 27 May 1779.

[41] Advertisement seeking deserters from Capt. Amos Cogswell's company, Col. Wesson's regiment. *The* (Boston) *Independent Chronicle. And The Universal Advertiser*, 9 October 1777. 'All Captains

Finally there are instances of deserters who are known to have made cruises on privateers before they enlisted in the Massachusetts Line.[42] Is it not possible that the greater freedom enjoyed by these men on that prior occasion when contrasted with the more rigid army discipline to which they were presently subject may in part account for their abhorrence and flight from the land service?

Be this influence what it may, only twenty-one deserters out of approximately twelve hundred cases of Massachusetts deserters which have come to the writer's attention are definitely known to have been sailors or 'bred to the sea.'[43] Should, however, a 'sailor's Habit' or better yet a 'sailor's dress' alone determine a man's occupation another thirteen men would have to be added to the list of sailor deserters.[44] On the other hand, even the larger number must not be taken as a true criterion of the number of seamen who fled the Commonwealth's land service because 'wanted' advertisements are far from complete on this score.

It will thus be seen that Massachusetts was confronted early with the problem of the man who fled its armed forces and sought refuge on board ship either to escape detection and punishment or make his fortune. Although the Commonwealth was at first slow to take action to curb this practice it eventually did so but does not seem to have been any too successful. This is evidenced by the ever more punitive statutes Massachusetts was forced to place upon its statute books and it was not until the War was nearly over that the Commonwealth finally succeeded in enacting sufficiently drastic legislation capable of effectively dealing with the problem.

of Vessels, who would not wish to incur the Penalty by Law, in this Case provided, are hereby cautioned against concealing or carrying away said Deserters.' The penalty cautioned against in all probability was the £9 -£15 fine levied against 'any person' who knowingly harboured or concealed a deserter rather than masters of ships or armed vessels as such. *Acts and Resolves*, V, 626-8, Laws, Chap. XXXVI, Fourth Sess., 1776-7.

[42] Amos Dimond 'came home the last Voyage with Capt. Laughton of Boston.' *The* (Cambridge) *New-England Chronicle: or, The Essex Gazette*, 24 August 1775. James Webber had 'lately been privateering.' *The Boston Gazette, and the Country Journal*, 31 January 1780. Nathaniel Piper deserted soon after he had returned 'From a cruize with capt. Whipple.' *The* (Boston) *Continental Journal, and Weekly Advertiser*, 2 September 1779.

[43] Stephen Caswell was described as a 'Seafaring Man.' *The Boston-Gazette, and Country Journal*, 17 March 1777. James Lown 'Was bred to the Sea.' *The* (Boston) *Independent Chronicle. And The Universal Advertiser*, 26 June 1777. John Cochran, Jun. was a 'Seaman.' Ibid., 8 May 1777.

[44] Joseph Smith 'had on a Sailor's Habit' when he deserted. Ibid., 20 February 1777.

New Light on the Earliest American Voyages to Australia

BY THOMAS DUNBABIN

AUSTRALIA, that great America on the other side of the sphere—as Herman Melville called it—attracted the attention of American mariners and merchants in the very early period of its settlement. Sydney, the earliest settlement, was only four years old when, in 1792, the first vessel from the United States entered the port. Sydney had not even been founded when, in 1787, *Alliance,* owned by Robert Morris and commanded by Captain Reed, passed Port Jackson on her way to Canton by the route round Tasmania and up the east coast of Australia.

In the twenty years from 1792 to 1812 at least 58 American vessels visited Australia or Australian territories. The list given below may not be final but it is more complete than any yet compiled. Recent inquiries in New England have made it possible to add new names.

The first list of American vessels visiting Australia in this period, which ends with the outbreak of the War of 1812-1814—a war which extended to the Pacific—was sent to London by Governor Macquarie of New South Wales with a despatch dated 8 March 1816. It includes only vessels using the harbour of Port Jackson and has 42 names. It is curiously incomplete, omitting *Rebecca, Union, Pilgrim, Rose, Favourite, Brothers, Criterion, Ann* (1805), *Eliza* of Salem, *Argo, Arthur, Fanny,* and *Patterson.*

On the other hand it includes *Betsey,* a British whaler, and *Anne* (really *Ann*) which was on the British registry at the time of the visits in 1810 and 1812 when Macquarie counts her as American. It transfers the visit of *Susan* from 1796 to 1800.

Robert McNab, usually a good authority, seems to reckon *General Boyd,* a whaler which visited Sydney in 1802, as American.[1] In this he has been followed by other authorities. *General Boyd,* though built in America and commanded by Captain Owen Bunker, an American by birth, was then registered in London and owned by Watson and Co. Owen Bunker was member of a Vice Admiralty Court held in Sydney on 14 July 1802, and

1 Robert McNab, *From Tasman to Marsden,* p. 98.

was therefore undoubtedly a British subject. Another Bunker, Eber, originally of Nantucket, was associated with Australian whaling and shipping for nearly thirty years but always on British vessels. He settled in Australia and is buried at Liverpool, near Sydney.

The list, giving the American port of registry where it can be ascertained, the Australian port or point visited, and the year of the visit, is as follows:

Ship	*Port of Registry*	*Port of Call*	*Year*
Philadelphia	Philadelphia	Sydney	1792
Hope	Providence, R. I.	Sydney	1792
Fairy	Boston	Sydney	1793
Halcyon	Providence, R. I.	Sydney	1794
Hope	Providence	Sydney	1794
Mercury	Providence	Sydney	1794
Abigail	Providence	Sydney	1795
Grand Turk	Boston	Sydney	1796
Otter	Boston	Sydney	1796
Susan	Providence	Sydney	1796
Mercury	Providence	Sydney	1797
Ann and Hope	Providence	Botany Bay	1798
Semiramis	Providence	Sydney	1798
Argo	United States	Sydney	1798
Resource	Providence	Sydney	1799
Belle Sauvage	Boston	Sydney	1799
Rebecca	New Bedford	Sydney	1799
Diana	New Bedford	Sydney	1800
John Jay	Providence	Sydney	1800
Caroline [schooner]	New Bedford	Sydney	1801
Follinsbee	Newport, R. I.	Sydney	1801
Hope	New Haven, Conn.	Sydney	1801
Missouri	Philadelphia	Sydney	1801
Portland	Boston	Norfolk Island	1802
Arthur	Providence	Sydney	1802
Fanny	Portsmouth, N. H.	Sydney	1802
Bertha Ann	New York	Sydney	1803
Charles	Boston	Kent Group	1803
Patterson	Providence	Sydney	1803
Mary	Boston	Sydney	1804
Fair American[2]	Manila	Sydney	1804

[2] *Fair American*, though listed in the Sydney shipping returns as registered at Manila, is not only included in Macquarie's list of American vessels but is described in contemporary United States newspapers as sailing under American colours. Thus the *Columbus Centinel* of Lynn, Massachusetts, for 26 September 1805 and the *Salem Gazette* of 23 October 1805 both speak of her as 'a ship from Manilla, under American colours.' Governor King of New South Wales suggested that she was put under American colours to evade the restrictions imposed on British vessels.

Ship	*Port of Registry*	*Port of Call*	*Year*
Union	New York	Sydney	1804
Independence[3]	New York	Sydney	1804
Pilgrim	Boston	Sydney	1804
Perseverance	Boston	Cape Barren	1804
Rose	Nantucket	Sydney	1804
Brothers	Nantucket	Sydney	1805
Favourite	Nantucket	Sydney	1805
Criterion	Nantucket	Sydney	1805
Hannah and Eliza	New Bedford	Broken Bay	1805
Ann	New Bedford	Sydney	1805
Aeolus	New York	Sydney	1805
Eliza	Salem	Sydney	1805
Catherine	New York	King George's Sound	1805
Grand Sachem	Newbury	Sydney	1807
Hope	New York	Sydney	1807
Jenny	Boston	Sydney	1807
Hannah and Sally	Philadelphia	Sydney	1807
Eliza [brig]	Providence	Sydney	1807
Topaz	Boston	Hobart	1807
Amethyst	Boston	Sydney	1807
Hero[4]	America (see note 3)	Sydney	1808
Aurora	New York	Sydney	1810
Hunter	New Bedford	Sydney	1810
Millwood	New York	Sydney	1811
Sally	Boston	Sydney	1811
Active	Salem	Sydney	1811

In the list given above a vessel is counted only once, unless it has, after touching at an Australian port, returned to America and then made another voyage to Australia. Thus *Hope* of Providence is counted twice, in 1792 and again in 1794, because she had in the interval returned to Providence and the second is quite a distinct and separate voyage to Australia.

Union is counted once only because she made but one voyage from New York to Australia, though she was in and out of Sydney several times in the course of sealing and sandalwooding ventures during that voyage. This is true also of *Independence*. *Pilgrim* visited Sydney twice and Hobart

[3] The 35-ton schooner *Independence* was built at American River, Kangaroo Island, in 1803-1804 by O. F. Smith and other members of the crew of the brig *Union* of New York. She was the first vessel built anywhere on the Australian coast outside New South Wales, and sailed under American colours. Her owners were Fanning and Company of New York.

[4] *Hero* is listed by Macquarie as an American vessel arriving in Sydney from New Mexico (presumably somewhere on the west coast of Mexico) and sailing for Chile. The Sydney shipping returns are missing for the greater part of 1808, no doubt owing to the upheaval caused by the 'Rum Rebellion,' the deposition of Governor William [*Bounty*] Bligh on 26 January 1808, and the period of usurpation that followed.

once. *Ann* visited Sydney twice in 1805. *Favourite* sailed from and returned to Sydney on a sealing voyage. *Criterion* sailed from Sydney to the Fijis and China, brought a cargo back to Sydney, and then touched at Hobart. *Aurora* was plying in and out of Sydney and made a voyage from Sydney in 1810 to the newly discovered sealing ground of Macquarie Island and back. *Philadelphia,* the first American vessel to visit Australia, was chartered to carry supplies from Sydney to the out-settlement at Norfolk Island.

Governor Macquarie lists *Jeannette* but not *Jenny*.[5] Some authorities list both. It seems certain that both names refer to the one vessel, *Jenny* of Boston commanded by William Dorr. Curiously enough, questions asked in the Calcutta Admiralty Court proceedings after the seizure of *Jenny* by H.M.S. *Dover* suggested that *Jenny* had once been known by some other name. Both Captain Dorr and the supercargo, Lewis Francour, denied that they had ever known the vessel to be called anything but *Jenny.*

The part taken in the trade by the various American ports engaged in it is shown by the following figures:

Providence, R. I.		15
Boston		13
New York		8
New Bedford		6
Nantucket		4
Philadelphia		3
Salem		2
Newport, R. I., New Haven, Newbury, Portsmouth, Manila	each	1
Port of registry not given		2
	Total	58

So far the history of these earliest relations between the United States and Australia has been written almost wholly from Australian materials. A note published in THE AMERICAN NEPTUNE, V (1945), 89-90, dealt with the best of these sources for American visits in the first part of the period. This is: *An Account of the English Colony in New South Wales,* by David Collins. From 1788 to 1796 Collins was Judge Advocate at Sydney and for this period he writes with firsthand knowledge. The second volume, continuing the history till 1802, was written at secondhand.

Some American vessels figure largely in the official records of the col-

[5] *Historical Records of Australia,* IX, 47.

ony. Of others there are only bare returns of arrivals and departures and for some not even these since they did not visit the port of Sydney for which the returns were kept.

A three weeks' survey in the autumn of 1948, made possible by the courtesy and help of scholars and custodians of records, showed that there is a wealth of material on these vessels to be found in New England. The following firsthand records were found and examined in the course of the visit:

(1) Log of *Ann and Hope,* 1798 (John Carter Brown Library, Providence, Rhode Island);

(2) Log of *Hannah and Eliza,* 1805 (Nantucket Whaling Museum);

(3) Log of *Topaz,* 1807 (Nantucket Whaling Museum);

(4) Papers of the ship *Favourite,* 1805 (Nantucket Whaling Museum);

(5) The *Jenny* Papers, 1807-1808 (Peabody Museum, Salem).

Ann and Hope left Providence on 10 July 1798, and ran to the South Cape of Tasmania in ninety days, an amazingly fast voyage for those days. That it was no fluke is shown by the fact that on her next voyage, in 1799, she made the run in ninety-one days.

She lay in Botany Bay from 21 to 25 October. On 22 October Samuel Snow the supercargo (later United States Consul at Canton), Thomas Tompson the assistant supercargo, Dr. Benjamin Carter the surgeon, and Page Junior (no doubt a son of Benjamin Page, the master) walked over to Sydney, eight miles away. They were guided by a 'man by the name of Smith' (Thomas Smyth, the Provost-Marshal), who had a farm at Botany Bay.

At Sydney they dined with Major Foveaux of the New South Wales Corps, to whom Captain Page had directed them, supped with Charles Grimes, the Deputy Surveyor-General, and met others of the 'first characters of Sydney' as Dr. Carter calls them in a letter.[6]

The high light of their entertainment came next day in the shape of a fight at the Barracks between two parties of aborigines. The 'fight' consisted in a man standing up while several others (from three to seven) on the opposing side hurled spears at him at a range of eighty feet. He had a shield with which to ward off the spears. Benelong, a native who had gone to England with Governor Phillip, had an iron shield given to him by the Governor. In spite of the iron shield Benelong was badly speared.

A number of the Botany Bay aborigines went on board the ship. They sold several of their spears for a biscuit each.

[6] Published in the *Salem Gazette,* 17 May 1799.

Hannah and Eliza left New Bedford on a whaling cruise to the South Seas on 30 April 1804. The log entry for Friday, 4 May, reads:

> At 6 p.m. was brought to by the *Leander,* British man-of-war, who sent a boat on board and impressed ten of our crew five of whom were apprentices. At 9 he left us to do what we pleased. We then made sail and hauled on a wind to return to New Bedford and make up a crew.

Hannah sailed again on 23 May. Next day she sent a boat in shore and 'caught a plenty of fish.' After that she discharged the pilot and cleared the Sow and Pigs. On Friday, 7 August, and again on Monday, 17 September, the log records catching 'plenty of haglets' [?Shearwaters] with hook and line.

The entry for Wednesday, 21 October, reads:

> At 9 a.m. saw a Seal asleep on the water. Saw three Sharks. The water green. At noon made Van Diemen's Land [Tasmania] bearing from N.E. to E., 5 Leagues.

Hannah and Eliza went over to the New Zealand whaling grounds. There she spoke various British whaling vessels, *Scorpion, Britany* [*Britannia*], *Donis* [*Adonis*], *Herit* [*Harriet*], *Ferit* [*Ferret*], *Otion* [*Ocean*], and one American, *Ann* of New Bedford.

On Friday, 19 April 1805, the logkeeper went ashore at Norfolk Island, then an outlying convict settlement, in company with Captain James Gwynn of *Ann*. Owing to bad weather they had to stay on the island for sixteen days but of this period the log has nothing to say.

From Norfolk Island the two ships sailed in company for Port Jackson, touching on the way at Lord Howe Island from which *Hannah* secured a boatload of wood and 'sum Pigeons.' The log entry for Wednesday, 15 May, reads:

> At 5 a.m. spoke the *Integrity,* Cutter, with a Spanish Prize bound into Port Jacson. At same time saw the Land abreast of Port Jacson. Made several tacks to try to get in but all in vain as the wind and current was against us. At Noon bore away for Broken Bay.

The Spanish prize was *San Francisco and San Paulo,* alias *Amiante,* a merchant brig which Captain Campbell of *Harrington* had seized at Coquimbo in Chile. Campbell had also carried off from Caldera Bay, after a short fight, a Spanish ship-of-war, *Estremina*. Campbell had gambled on the chances of an Anglo-Spanish war. Learning at Norfolk Island on his return that no news of war had been received he sent *San Francisco* to Kent

Group in Bass Straits, in charge of a prize master, Arnold Fisk from Johnston, Rhode Island.[7] *Integrity* was bringing in *San Francisco* when *Hannah* spoke her.

It may be doubted whether *Hannah and Eliza* tried very hard to get into Port Jackson. *Ann* managed to enter that day, and so did *Integrity*. Broken Bay, fifteen miles north of Port Jackson, offered a good harbour, plenty of wood and water, no port dues, no crimps, and no grogshops. The use of local names suggests that someone on board knew Broken Bay.

Off Hungry Beach *Hannah and Eliza* lay for a week (16-23 May), with plenty of wood and a good stream of water at hand. They heeled the ship to pay her bends and made a new fid for the main topmast out of beefwood [eucalyptus], 'which is very hard and strong.' They saw natives both ashore and in two canoes but had no communication with them.

From Broken Bay *Hannah and Eliza* cruised off the east coast of Australia until 23 October 1805, when she returned to Broken Bay. This time she ran two miles up the Hawkesbury River, which empties into the Bay. There she stayed until Thursday, 20 November.

In those days traffic between the farming districts up the Hawkesbury and Sydney was carried on largely by sea. The log for Friday, 25 October, records: 'Bought 10 bushels of Corn and a Hog weighing 95 lbs. out of a Hawkesbury boat.' Perhaps as a result of this contact Thomas Millar was missing when all hands were mustered at 6 A.M. on Sunday, 7 November. It was assumed that he had swum ashore.

During this visit *Hannah and Eliza* was smoked for rats. This took two days and at the close thirty dead rats were found.

Hannah and Eliza now went over to the New Zealand grounds. On this cruise she met not only *Ann* (to whom she lent a boat) but *Brothers* of Nantucket (Captain Benjamin Worth) and *Aurora* of New York (Captain Andrew Meyrick). On 19 February 1806, *Hannah* lost a whale with a tub of line. Captain Worth, who found the whale, returned the line and gave *Hannah* half the oil (8 barrels).

Hannah's logkeeper went ashore on Norfolk Island with Captain Gwynn of *Ann* on Friday, 28 February. From the island *Hannah* secured two casks of pork, fowls, onions, maize, vegetables, and fruit. The entry for Thursday, 13 March, reads:

> Left Norfolk Island to make a passage by the way of Cape Horn. Lost sight of the island at 9. The *Ann* in company.

[7] *Historical Records of Australia*, V, 479.

On Saturday, 26 August, at 6 P.M., *Hannah and Eliza* 'past the Equator to the Northward, after being 24 months and a half to the Southward of it.' On Friday, 29 August: 'Spoke the brig *Norfolk* of Charleston, 40 days out bound to Goree. Got a supply of Tobacco and rum.'

The last entry in the log reads:

> Wednesday, September 24—At 4 p.m. spoke a packet from Bristol bound to Cork who told us the Hook Light bore NNE by compass. Saw several ships bound up the Bristol Channel.

Below are the words: 'M. Gardiner [?Micaiah Gardner] Master.'

Captain Gwynn, whose ship had 'mated' with *Hannah and Eliza,* visited Sydney again in 1810 and 1812 in *Anne* (obviously the same ship as *Ann* since the tonnage is the same, 288 tons, and both are described as built at New Exeter). The ship was now owned by B. Roche of Milford [Milford Haven in Wales]. Obed Macy of Nantucket notes in 1814 the return via Halifax of James Gwynn, who had for some years been commanding British whaling vessels.[8]

Topaz, commanded by Mayhew Folger, sailed from Boston on 5 April 1807. She was at Bonavista [Cape Verde Islands] taking in salt from 4 May to 13 May. There, on Sunday, 10 May, Edward Allen, ordinary seaman, 'denied his duty' and was put in the stocks. On Sunday, 14 June, Folger landed on Trinidad, off Brazil, but had a boat stove and gave up the idea of taking water there.

On 1 August Folger began a search for the mythical Isla Grande, laid down in his chart at 47-40 S., 38-43 W. He also sought the equally mythical 'Pepys Island, as laid down by Cowley' [William Ambrosia Cowley, M.A., of Cambridge and shipmate of William Dampier]. He satisfied himself that 'no land exists nearer than South Georgia,' a too sweeping conclusion.

From 9 to 23 August *Topaz* battled against heavy seas and bad weather (including on 15 August 'as heavy a fall of snow as I ever saw'). The entry for Friday, 21 August, is: 'Very heavy gales and a tremendous Sea such as I have rarely seen in the course of my peregrinations.'

With the ship strained and leaking 200 strokes of the pump an hour and with his boats damaged Folger stood to the eastward, noting on Wednesday, 9 September: 'We are running for the Isle of Nachtigal, as laid down in our charts of the Indian Ocean.' Finding that it too did not seem to exist he bore up for Kerguelen, intending to water there. Snowstorms

[8] Obed Macy's manuscripts, Nantucket Historical Society.

and offshore winds decided him to stand away for Van Diemen's Land [Tasmania].

At 6 A.M. on Tuesday, 13 October (14 October by civil time) he sighted 'the Southwest Cape of New Holland.' Obviously the charts carried by *Topaz* did not show Bass Straits, discovered by Bass and Flinders in 1798 and first traversed by an American vessel (*Fanny* of Portsmouth, New Hampshire, Eliphalet Smith, master) in 1802.[9] After beating about for a time between Bruny Island and what Folger calls Maria's Island [really Tasman Peninsula] *Topaz* anchored in Adventure Bay on Friday, 17 October 1807.

There Folger took his jolly boat on shore and repaired it. He took in twenty cords of wood, cut some timber, caulked a leak, watered, looked for natives but saw none. The log continues:

> Saturday, October 24—At 5 a.m. weighed and sailed from Adventure Bay. At 8 a.m. was boarded by H. B. Majesty's Ship *Porpoise,* Lieut. Simmons [Symons] Commander, who wanted Supplies and I agreed to accompany him up the River Derwent. At 11 a.m. his Surgeon came aboard to a sick man of ours.
>
> Sunday, October 25—Standing up the Derwent with the *Porpoise* in company. At 7 came to in 12 Fathoms about a league below the Town. At 5 a.m. Weighed and Ran up River within a Mile of the Town. At 8 I went on Shore to attend the Governor [Lieut.-Governor David Collins] who sent a Guard on board. So ends this 24 hours.
>
> Tuesday, October 27—Delivered some Rum and Gin to be landed.

The log says no more of the Rum and Gin. Other evidence is that the officers of *Porpoise* bought 800 gallons of rum and 150 of gin, used 300 gallons on board *Porpoise* and sold the rest at a handsome profit.[10]

On Sunday, 1 November: 'There came a Guard on Board and Smoaked Ship to find Deserters [stowaway convicts] but found none and an extra Guard came from the *Porpoise* to accompany us to sea.'

Topaz left Hobart, then a raw settlement only four years old, on Tuesday, 3 November. Finding the wind against her when she came out of the Derwent estuary she ran into the northern end of Storm Bay Passage [now D'Entrecasteaux Channel] on the afternoon of Wednesday, 4 November. Then comes this tantalizing passage: 'Brought on board several natives to see the ship and landed them again.' Folger might well have told us something of these primitive savages who so closely resembled in their position and their fate the now equally extinct Beothuks of Newfoundland.

[9] See Captain Smith's letter, *Salem Gazette,* 27 July 1803.
[10] *Historical Records of Australia,* VI, 553-554.

Next day Folger went on shore to hunt for black swans but found none. *Topaz* sailed early on Friday, 6 November. At 10 A.M. she was abreast of Adventure Bay when they saw a boat pulling after them. 'Supposing it to be a deserters' boat did not shorten sail.'

From Tasmania *Topaz* sailed to the Chatham Islands. There they met Captain Scott of a Sydney sealing schooner who told them that every island was full of natives, the now extinct Morioris. Natives and seals do not go well together. But on a large rock off Pitt Island the crew of *Topaz* killed six hundred seals, the first taken on the voyage.

Leaving the Chatham group on 26 November *Topaz* sailed for the Penantipodes. There Folger found two sealing gangs but no seals.

Sailing from the Penantipodes on Friday, 18 December, Folger searched for Bristow's Islands [the Auckland Isles discovered by Abraham Bristow, master of the Enderby whaler *Ocean* in 1806] but failed to find them. While 'feeling round' for these islands he sighted two icebergs in 53-3 N., 179-49 W. He then sailed northeastward.

On Saturday, 6 February 1808, *Topaz* sighted Pitcairn Island. The log thus describes the shock of surprise that awaited Folger at this supposedly uninhabited island discovered by Carteret in 1767:

> At 6 a.m. put off two boats to explore the land and look for Seals. On approaching the Shore saw a Smoke on land at which I was very much surprised, it being represented by Captain Carteret as destitute of inhabitants. On approaching still nearer the Land I discovered a Boat paddling towards us with three men in her. On approaching her they hailed us in the English language and asked who was Captain of the Ship and offered us a number of Cocoanuts which they had Brought off as a Present and requested I would land, there being as they said a White Man on Shore. I went ashore and found an Englishman by the name of Alexander Smith, the only Person remaining out of nine that escaped on board the Ship *Bounty*, Captain Bligh, under the Command of that arch mutineer Christian.

Folger then tells briefly the story of the *Bounty* mutineers on Pitcairn, as related by Smith [later known as John Adams]. Of Smith he remarks: 'He lives very comfortably as Commander-in-Chief of Pitcairn Island.' The children of the mutineers he calls 'a human [humane] and hospitable people.' Folger 'tarried on shore with the friendly Smith and his truly good people' until 4 P.M. on Sunday, 7 February.

Then he went on board and sailed for Mas-afuero, taking with him some hogs, coconuts, and plantain. The last entry in the log is dated 20 February, with the note: 'To be continued in another book.'

The *Favourite* papers include this 'extract from the Ship *Favourite's* Journal':

	Skins
At Canton, January 8, 1807, Discharged	25,000
At Canton, January 9, 1807, Discharged	30,000
At Canton, January 10, 1807, Discharged	32,080
	87,080

It was probably the largest cargo of sealskins ever carried by one sealing vessel but they were not all collected by *Favourite's* crew. The 245-ton *Favourite,* owned by Paul Gardner and Co. of Nantucket and commanded by Jonathan Paddock, with Daniel Whitney as supercargo and part owner, came to Port Jackson on 25 April 1805, after sealing at the Crozet Islands. Simeon Lord, ex-convict and Sydney's leading merchant, had in his stores 19,000 sealskins secured by the brig *Union* of New York, which had been lost while trying to carry out a contract with Lord to secure a cargo of Fiji sandalwood for Canton.

In addition *Union* had left a sealing gang of a dozen men on the Penantipodes. Lord arranged for *Favourite* to pick up the sealskins collected on the Penantipodes. *Favourite* sailed for the Islands on 11 June 1805. On 10 March 1806 *Favourite* returned to Sydney with 60,000 sealskins. She is described as coming from 'the E. Coast of New Zealand.'[11] Obviously she had gone sealing elsewhere after collecting the Penantipodes skins.

The Sydney shipping returns show only 32,000 sealskins on board *Favourite* when she sailed for Canton on 29 June 1806, but no doubt she carried the 60,000, the 19,000 left with Lord by *Union,* and a few thousand others—probably put on board by Simeon Lord. Yet Obed Macy, acting for Paul Gardner, Jonathan Paddock, and Daniel Whitney, says in an undated 'copy of a statement' that 'the total number of skins they furnished me with' was 34,356. They were valued at 80 cents each, described as the cash price in Canton.

This was the number and the value used by Macy in settling with members of the crew. The value of the skins was, at 80 cents each, $27,484.80, from which Macy deducted $1,450.12 for expenses, leaving $26,034.68. Thus Philip Coffin, who was on a lay of one in 45, received $558.55. Valentine Coffin's lay was $260.35.

Nowhere in these papers is there any mention of Simeon Lord, or of the sealskins from the brig *Union,* owned by Fanning and Co. of New York. There are minor accounts paid by Whitney in Sydney.

11 *Historical Records of Australia,* V, 767.

As for Jonathan Paddock his luck did him little good. He sailed in 1809 for Surinam as master of the sloop *Leander,* was washed overboard when eighty miles out of Nantucket and drowned.

Jenny was one of three sealing vessels sent out about the same time by John Dorr of Boston. The others were *Topaz* and *Amethyst. Amethyst* put into Sydney in December 1807, while *Jenny* was there, but stayed only two days.

Commanded by William Dorr, Jr., *Jenny* carried from Boston 21,477 Spanish dollars, as well as a cargo of provisions, spirits, and 'notions.' Sailing from Boston on 7 June 1807, *Jenny* touched at Tristan da Cunha, Gough's Island, St. Paul, and Amsterdam—apparently without securing any sealskins—before reaching Port Jackson at the end of October. At Sydney she sold the whole of her cargo except seven or eight casks of spirits, according to Captain Dorr.

Having in mind, perhaps, the disastrous sandalwood contract made by Captain Pendleton of *Union* with Simeon Lord, John Dorr had instructed Captain Dorr to be 'independent of any binding contracts at Port Jackson.' The cargo sold at Port Jackson was paid for by bills of exchange on London and Canton for £2,847/8/1 and by 7,000 odd dollars. *Jenny* also shipped at Sydney 18 tons of sandalwood.

When *Jenny* sailed from Sydney in March 1808, she put into Broken Bay. Governor Bligh, then deposed, says that the 'Usurping Government' ordered her to leave at such short notice that she had to put in to stow her cargo. However, boats from H. M. S. *Porpoise* seized *Jenny* and brought her back to Sydney on a charge of smuggling. A Vice-Admiralty Court dismissed the charge.[12]

Thus freed, *Jenny* sailed to Fiji for sandalwood. Though dismasted in a gale off Tonga she reached Sandalwood Bay, Fiji, on 22 May, and stayed there till 15 September. William Dorr, in a letter dated 29 August 1808, states that he had bought 120 tons of sandalwood and had 'trade' enough to buy 30 more, which would fill the ship. In a later deposition Dorr and the supercargo, Lewis Francour, say that they shipped between 80 and 90 tons, making 100 with that shipped in Sydney. And Captain Dorr, when questioned in court, said that he had 120 tons on board.

At Sandalwood Bay Captain E. Hill Correy of the 135-ton brig *Eliza* of Providence, Rhode Island, came on board *Jenny. Eliza,* which had been at Port Jackson with *Jenny,* had been wrecked and Correy had, Captain

[12] *Historical Records of Australia,* V, 534.

Dorr says in a letter, only the clothes in which he stood up. But he had saved and brought with him in his boat between 5,000 and 6,000 Spanish dollars. According to the *Columbia Centinel* of 29 May 1809, there had been 28,000 dollars on *Eliza*.

Extracts from *Jenny's* logbook show that after leaving Fiji she tried to reach the Carolines to look for beche-de-mer but failed and made Tinian on 15 October. On Tuesday, 25 October, she anchored off Guam where she secured spars for masts, 2,000 deer's horns, 10 tons of betel-nut, and some beche-de-mer.

The entry for 27 November is:

> The Spanish Governor [of Guam], Don Alexandro Parrino, with 8 or 10 of his officers, came on board to inquire into the report of Captain Corey's [Correy] having piloted the English Fleet[13] up to Buenos Aires; after being on board the best part of the day he took dinner and went on shores, taking with him Captain Corey and his money.

On 10 December 1808, *Jenny* sailed from Guam for Canton. On the way Captain Tucker of H. M. S. *Dover* seized her on the ground that she was breaking a blockade imposed by British Orders-in-Council on Guam and other possessions of Spain. The Vice-Admiralty Court at Calcutta declared *Jenny* and her cargo to be lawful prize.

Captain Dorr and Francour appealed against this decision and Thomas Wilson, merchant of London, acted as their agent. The Lords Commissioners of Appeal in Prize Causes in London reversed the judgment and freed *Jenny* and her cargo. So ended the case of *Jenny* of Boston, twice seized by a British warship in the course of one voyage.

[13] Either the Hume Popham expedition of 1805 or that of 1806-1807, most probably the latter as *Eliza* reached Sydney from Buenos Aires on 9 December 1807.

Notes

Comments on 'The Design of the American Frigates of the Revolution and Joshua Humphreys'

I should like to fan any controversial fires that Mr. Howard I. Chapelle's article in the July 1949 issue of the Neptune may have kindled. In working with both the Humphreys papers and the Fox papers, I have not reached a very satisfactory conclusion as to the relative merits of the two designers. Both, in later life, claimed much. Humphreys' claims seem more consistent.

Mr. Chapelle's statement regarding a plan of the 38-gun class of the 1794 frigates[1] is of course refuted by Humphreys' relation of the business some thirty-three years later;[2] but Humphreys also mentioned the draught before much controversy had developed. Josiah Fox, a young assistant in the War Office, took unto himself too much credit to suit Humphreys, so Humphreys set James McHenry, the new Secretary of War, aright.

'Permit me to observe,' he wrote on 5 June 1795, 'on seeing your instructions to Mr. Fox; that soon after the commencement of building, I was directed to prepare a Draught and Model for them, the Model was presented to the late Secy at War and is now in your office, in order to make them the Most perfect Ships the best shipwrights of this port were called in to give their opinion on the model, which they did candidly, I was then directed to make such alterations in the formation of the Frigates body as was conformable to the General Idea. Mr. Fox appointed under me to carry the same into effect, accordingly I directed him to prepare a draught agreably to the directions I had recd but I conceived he did not strictly conform to those directions in the drawing of the draught; which induced me immediately to set about drawing myself, and I produced those the Frigates are to be built by without Mr. Fox's advice or assistance. . . . While I was drawing the draught of the 36 Gun Frigate . . . Mr. Fox was laying down the 44 Gun ships in the mould loft—when that was finished Mr. Fox and Mr. Doughty went to copying the Draughts to be sent to the different builders . . . while . . . I was laying down the 36 Gun Ships in the Mould loft. . . . On the other hand I think there are few men in this country equally qualified. . . .'

Humphreys' reasoning as a builder and designer is generally sound, but I have run across a few examples that may reflect the times as much as the man. Two or three questionable conclusions and opinions are set down in order to illustrate his fallibility.

Joshua Humphreys argued against a raking bow, since he thought the vertical bow would strike more obliquely in a sea, the raking bow more at right angles. Also, ships should be sharper aft than forward 'to give the water full force on the rudder.'[3]

When the indestructible 1794 frigates began to rot in 1801, he was perplexed like all the others who expected them to last for many decades. 'I am firmly persuaded,' he wrote, 'the premature decay in our ships was caused by the foul air in the hold.' It might be prevented, he thought, 'by salt and sufficient ventilation.'[4] It was normal for him to blame foul air. It had wonderful disorganizing powers, and among other things was responsible for the yellow fever epidemics.

[1] The American Neptune, IX (1949), 163.

[2] Historical Society of Pennsylvania, Humphreys Papers, Letter Book, vol. 3 (1800-1834), Joshua Humphreys to Samuel Humphreys, 20 August 1827.

[3] Letter Book, vol. 1 (1793-1797), pp. 79, 80.

[4] Letter Book, vol. 3 (1800-1834), 5 September 1812.

The white oak beams, he had early decided, should be mortised, slitted, and packed with salt before the deck planking was fastened in place.[5] I do not know enough about the rotting of timber to draw any conclusion from his reasoning, but it does not seem logical that salt packed in a beam would greatly delay decay. A good modern statement of experience with rotting of wooden vessels would be greatly appreciated.

The last point of question has to do with Humphreys' preference for pitch pine rather than white oak for beams. His conclusion was supported by a single test. Two sticks, 2 feet 3 inches long and three quarters of an inch square, one of pitch pine and one of white oak, were stressed by supporting the ends and placing a load at the center. The white oak snapped, while the pitch pine sagged until it touched the floor. This was certainly jumping at a conclusion, even though the conclusion may have been correct.[6]

If, as Mr. Chapelle concludes, Joshua Humphreys' talents were not great, it is only fair to ask whether the talents of any of his contemporaries were even equal to his. Live oak frigates, their frames moulded and sided by the sawyer standing on the timber with his pitman sawyer beneath, and then raised into place by sheers and hand tackles—was there in 1794 a man of sufficient genius anywhere to avoid the many pitfalls of building the heavy ships?

The building of the 1794 frigates has a definite place in a history of the technology of shipbuilding, which technical men and historians alike have so far shunned. Until more interest is shown in technical history by people competent to write it, we are not likely to have a satisfactory appraisal of Humphreys and his contemporaries. Nevertheless, the publication of the Humphreys papers would be an important addition to the literature of shipbuilding.

EUGENE S. FERGUSON

[5] Letter Book, vol. 1 (1793-1797), p. 77.

[6] Letter Book, vol. 1 (1793-1797), pp. 14, 39.

Reply to Mr. Ferguson's Comments

I was aware of the Humphreys' claims and had carefully examined them; the result will be seen in my *History of the American Sailing Navy*.[1] But, here, I wish to say that one conclusion I have reached regarding Humphreys is that he was a master at distorting evidence. His statement, as quoted by Mr. Ferguson, appears to be a partial truth only that tends to create a favorable impression of his claims. This is accomplished by truthfully describing occurrences but placing them out of correct sequence. The story he presents can be judged by the facts. When Humphreys had presented his model—and nowhere in the correspondence was there any mention of a draught—Knox discussed the design with his advisors, Barry among them. While this was going on Fox was brought into the picture by political adherents of Knox's party. Fox then prepared a design to represent his ideas. This he presented Knox and the plan was laid before the advisors. Both the model and plan were rejected and the instructions prepared. In view of the fact that both the model of Humphreys and the plan of Fox are gone it is now impossible to say whose ideas predominated in the resulting 'instructions.' The plans, as evidence, indicate that Humphreys prepared his draught *Terrible* to incorporate the instructions. The result was too crude for building so working plans were made by Fox and Doughty. There are copies of the building offsets in existence in Fox, Humphreys and in official files—these are all the same. They check with the Fox-Doughty plans but do not conform with Humphreys' *Terrible* as would be expected from the very crude draftsmanship of the Humphreys plan. Humphreys' attempt to discredit

[1] Mr. Chapelle's reply was written in the autumn of 1949 before the publication of *The History of the American Sailing Navy*, which is reviewed in this issue by John Lyman. Because of the current discussion, we have deviated from the NEPTUNE practice of publishing unsigned book reviews in this instance.—EDITORS.

Fox entirely led to claims by Humphreys that both the surviving plans and offsets show to have been entirely and intentionally untrue. I hold no brief for either Fox or Humphreys in this matter; the designs of the two classes of frigates were committee actions and not the sole responsibility of either. In truth, both Fox and Humphreys held opinions of ship form that the frigates as designed did not exhibit—were these the ideas of Wharton, who was a very influential advisor of Knox?

Humphreys was a very sound builder, regardless of his admiration for himself. He was, in fact, a far better builder than a designer. His opinion on the use of salt to prevent rot is commonly considered sound among shipbuilders. He did not originate this, of course, but he was following sound practice of the time and later. His ideas on 'foul air' are reasonable in that if ships are well ventilated they are unlikely to rot quickly. I do not think it fair to criticize Humphreys' ideas on timber for American timbers were not well known in his time and there is still some difference in opinion among shipbuilders, naval architects and ship owners as to which timbers are best for specific uses.

My opinion of Humphreys I have expressed; he was a very sound and intelligent shipbuilder. He was a very poor draftsman and was not really a ship designer. He used models instead of plans in designing. He did have a very good eye for hull form, however, and his failure as a designer was in his inability to express his ideas on paper or in a model so that the form was readily apparent. Technically he was far inferior to Fox but I think his eye for the 'art' was superior. In short, he was a very capable man who in his anxiety to obtain credit did not hesitate to belittle others. He was not of great caliber in fact, but rather a poorly trained man with much natural ability. He was certainly inferior to many of his contemporaries and, I dare say, he was superior to many. That is perhaps the fairest judgment I could arrive at; he was competent but not 'outstanding.' He was obviously inferior in ability to the Huttons, and to whoever designed the 1776 ships—Wharton? His son, Samuel Humphreys, was far better trained and a better ship designer.

I do not think Humphreys or Fox was responsible for the mistakes made in building the 1794 ships; the errors with regard to timber, etc., were the results of 'committee design' and in establishing design by vote, Knox must be made responsible. The frigates were, structurally, a problem only in their then great length in proportion to depth and in this field all the naval powers had been having trouble for at least a half-century before 1794. So far as timber was concerned, and rot, all the navies were in trouble.

The errors in the frigates were: too great a size for American facilities for maintenance, too great a length for technical knowledge, high cost of construction and manning. But, in spite of these errors the ships were found to be correct for they set the standards for the world in frigates, in size, armament and speed.

Actually, Humphreys was a very important figure, in naval shipbuilding only, from 1794 to 1799. Is it to be argued that in only naval building were there advances in American shipbuilding technique? It is only our lack of available record that makes us so intent on establishing Humphreys, Fox or some other individual as the 'leading shipwright' whereas the truth is there were no leading shipwrights as there were a great many capable but little publicized builders: the designer-builder of *Enterprise*, the Huttons, Cheeseman and a multitude of others whose ships and small craft made American shipping noted abroad for speedy sailing. After many years of effort to understand the trends and development of American shipbuilding and design I have come to a number of conclusions; we have mistaken the existence of records alone as

the proof of importance; we look for and always try to establish a dramatic story, with many 'firsts,' of ship development whereas in truth the development was a slow, step-by-step improvement: we have made certain individual designers, Humphreys, Fox, Steers, Griffiths, McKay for examples, important beyond all reason by accrediting them with 'firsts' or qualities of invention they did not possess. Marine research is now at least of age and it is time to bring the maritime history of this country into reasonable sequence without over-emphasizing single events or individuals beyond just proportions. No one, I think, is yet capable of deciding all questions of the Humphreys controversy, but I hope that there will be more questioning of the various claims than has yet been seen. This is not only true of Humphreys but also of Steers, McKay and others. Still, 'debunking' is not required, rather the bringing of men and events back into a semblance of real and honest importance. An attempt to strip Humphreys of any credit due him cannot be justified, but on the other hand his obvious attempts to exclude Fox from any credit is unwarranted and therefore the Humphreys' statements, in the light of the existing plans and papers, must be carefully checked before being accepted. But, in bringing both Humphreys and Fox into something like a correct relationship we must not forget that, somewhere in the background, there was the anonymous 'authority' who advised Knox and so over-rode both the naval constructors by setting up the 'instructions.' This 'authority' was the real designer of the frigates and Humphreys, Fox and Doughty were actually no more than chief and draftsmen in the architect's office.

In stressing the questions regarding Humphreys' and Fox's claims we are too readily led to the assumption that the two men were of far greater importance, or possessed more influence, than was really the case. The great size of the 1794 ships, for example, has led to speculative discussions pointing to the assumption that Humphreys was the originator of this idea. It should be stressed that the idea of ships of a given rate being built of relatively large dimensions existed a hundred years before and is illustrated in surviving plans in the Admiralty collection of draughts. Even the ships of the Revolution were very large for their rates and the grandiose inference of Humphreys that he was responsible for the huge size of the 1794 designs is ridiculous. The same holds good for Fox, he was not the author of any astounding improvement in American ship design: in his behalf it can be said that he made no claim of this nature.

HOWARD I. CHAPELLE

A Letter to the Editors

I HOPE you will not consider me as presuming on the rôle of a subscriber. Being on my vacation, I have taken along the July number of the NEPTUNE and read it, including Mr. Chapelle's article, or argument, on 'The Design of the American Frigates of the Revolution and Joshua Humphreys.'

I differ with you on the propriety of publishing the above mentioned writing. The NEPTUNE, to me, is a repository of historical research based on quoted or available evidence. The Chapelle article certainly can not qualify in this category, although perhaps a short critical note might be used. The presentation of documented research, such as I recall the Brewington article to be, later damned by the publication of a rambling personal opinion in which accepted sources are ridiculed, most certainly is to be deprecated.

It is my impression, and I have not much doubt that a glance at the volumes of NEPTUNE would bear it out, that the citation footnotes to published articles have been as important to the Editors as the texts of the articles themselves. To me, a lawyer, such citation is indicative

of careful research and is evidence of reliable statements. Law and historical research have much in common, and I know that I would be laughed out of any court in the land, were my case not briefed in a logical manner and bolstered by authority. Past issues of the NEPTUNE bear witness that the Editors have approved the policy, if indeed they have not demanded, that articles be accepted for publication only if they be found to be based on first hand knowledge or cited to source or document. There is in the article, to be true, reference to authority, but this is only an attempted one, to the writer's recollection of 'one order to Humphreys, among his papers,' which Chapelle for some reason seems to doubt can now be found and which he insinuates would confound statements in the Brewington article which he so roundly criticizes. I would even venture to wager that the Brewington article, which I do not have with me, has reference to the doubted Humphreys order.

While a forum for the expression of opinion is a healthy affair, I maintain that the NEPTUNE rôle should include no such purpose. The logical result of the establishment of such a precedent would even allow me, as a subscriber, to demand the publication of my probably irresponsible views on a number of subjects, entailing irate and numerous answers and 'raspberries' and so on, *ad infinitum*, with the consequent destruction of the mission and goal of the magazine. Rather let the NEPTUNE continue, as heretofore, to hold as valuable those writings on matters whose authors have consulted available recognized source material, and let its readers air their opinions among themselves, if they wish, on the basis of its published and authentic knowledge.

I well know of whose work I am writing, and, together with many other NEPTUNE addicts, recognize Chapelle's literary flavor, a little too sugary in this instance to be true. I know that he has designed boats. I am familiar with his experience as a builder, with his undoubted facility as a draftsman, and his energy as a searcher for half-models and old plans. I have his books. Who am I to fly in the teeth of such a gale?

I am compelled to say, nevertheless, as one who heretofore looked on Chapelle as authoritative on matters nautical and as one who cherishes the NEPTUNE, that I regret the article and find its presentation objectionable for reasons in addition to those already stated.

The article is based on personal statement. Even if this had not been admitted by the author, its discerning reader will readily note the repeated use of such words as 'think,' 'believe,' 'probably,' 'theorize,' 'seems,' 'claim,' 'may be,' 'must have been,' 'self-evident,' and the like. Even in a forum for the expression of opinions, the pronouncements of a protagonist are worthless unless they be formed on a sound basis. I find here, however, that Chapelle admits of slight knowledge of the Humphreys papers, a *full* knowledge of which, as well as of all other knowledge concerning him, is to me a *sine qua non* of any worthwhile opinion or writing on any subject in which Humphreys may be concerned. Also, 'there is probably evidence on the matter with which I am not acquainted.' Indeed the author's opinion that the *Randolph* design was not that of Humphreys is, so far as the article is concerned, based on one plan alone, that of the 74-gun ship of 1798 delineated in Plate 17. There are, to be sure, many other pronouncements (the lawyer would say 'dicta'), such as the author's doubt that Humphreys originated the building policy that produced the frigates of 1794-1796, other judgments impugning Humphreys' honesty and that of his son, the slighting of documentary evidence by likening it to the author's conception of present day government correspondence, and other matters which are entirely irrelevant. In fact, I find so many contradictory and illogical

statements made and positions taken that I am almost at a loss. Thus, the writer states that he is not competent in handwriting identification, yet in almost the next breath doubts certain writing to be that of Joshua Humphreys and attributes it to his son; in other instances he professes to identify handwritings. One statement of Humphreys is taken to be true and another to be false. Statements of other documents are taken to be true and those of Humphreys to be false. Claim is made that draftsmanship can be identified if a few known plans are available, yet on one 'known' plan alone is based the whole argument that *Randolph* was not designed by Humphreys. Humphreys' draftsmanship is identified by reference to the plan of the 44-gun frigate *Terrible,* but the author only thinks this plan 'may be the Humphreys original.' *Illustrious President* is passed over as a standard, the author again 'experting' handwriting. It seems strange that, even if 'only a very few of the surviving plans can with certainty be said to have been drawn by Joshua Humphreys himself,' all of these plans, although few in number, are not presented and used to confound the idea that Humphreys designed the *Randolph*.

I wonder if Chapelle has entirely overlooked the difference between the actual handwork involved in drawing a plan and the intellectual work involved in the design of a ship. There is no careful distinction made in his article along this line and, in fact, the author seems to assume, with the exception of mentioning that Samuel Humphreys acted as draftsman for his father at one time, that each designer to whom he refers did his own drawing. So far as the article in question is concerned, it could readily be the case that either Fox or Doughty drew the plans for, and that Humphreys designed, the *Constitution* and *Constellation* class; and that the 'work assigned to Hackett, Doughty,' et als, by the draftsmanship of which it is inferred that the designer may be determined, was actually the manual labor of John Doe, Robert Roe, et als. Could it be possible that the 'very competent builder who had a good "eye" for hull-form' and who 'did not develop a drafting style until after the Revolution,' when commissioned to produce an important ship, engaged a skilled draftsman to put on paper in fine form for official presentation his own worked-out design? On the credible evidence, either Humphreys designed *Randolph* or Chapelle's statement, in referring to the twenty some years intervening between the design of *Randolph* and the design of the 74 of 1799, that 'no man's draftsmanship could possibly make such a complete change in a professional lifetime' is not the case, or his argument is:

1. A plan may be identified by its drafting style.
2. Humphreys did not develop his drafting style until after 1783.
3. Humphreys drew the plan of the 74 in 1799, after he developed his style.
4. The drafting of the *Randolph* plan of 1776 is not similar to that of the 74 of 1799.

Therefore: Humphreys did not draw the *Randolph* plan in 1776 because he had no drafting style.

The conclusion, of course, is absurd. I myself have not wished to be carping and straining after gnats, but the author's objections are 'very technical.'

Concerning the Independence Hall model of the 74-gun ship, there is also a peculiar and dogmatic line of reasoning. The thought seems to be along the line of an anticipated rebuttal to the expected answer to the author's argument, the answer being that, since this model was made by Humphreys from his own plan and since this plan and that of *Randolph* are in the same hand, therefore Humphreys must have drawn the *Randolph* plan. Chapelle's rebuttal seems to be that, since his argument is correct, the answer to the argument must be wrong! I can give no evidential weight

to the author's statement that the model does not correspond in all particulars to the plan, nor do I think that Chapelle really does either. In his own words, the changes in the model were 'improvements.'

Other reasons might be detailed but I fear to presume too much. In summary, if NEPTUNE is to be a forum, which I hope it will not be, then let the opinions expressed be to the point and not discursive, based on known fact and not on convenient assumption or mere statement; and if grounded on technical reasons, then let them be consistently technical and logical.

I have flown in the teeth of the gale and await the blast.

CLARKSON A. CRANMER

THE ELIZABETH ISLANDS JINGLE

AT the risk of provoking readers of THE AMERICAN NEPTUNE to a state of distraction, I submit herewith variations of the age-old rhyme formed by pronouncing in some sequence or other the Indian-derived names of the Elizabeth Islands which lie south of Cape Cod. Not long ago I innocently included the version of the little mnemonic jingle as handed down in our family in an account describing one of my first trips out to Pasque Island.[1] Not wishing to rely entirely on my memory when committing the verse to paper, I confess that I verified it from a little privately printed account of Pasque written by my grandmother, Mary Elizabeth (Mrs. John Crosby) Brown. This bore the title, *A Short Account of a Summer Outing, for my Children,* and I judge it to have been written in 1882 or 1883. My grandmother mentioned visiting a house on Nantucket belonging to 'the present' Secretary of the Treasury, Charles J. Folger. Mr. Folger had received his appointment to that office in 1881 and he died in 1884.

[1] 'Enchanted Voyage,' THE AMERICAN NEPTUNE, VII (1947), 213-223.

Here then is the verse which was to produce a teapot-tempest of controversy. Despite the outlandish appearance of the islands' names in print, they seem to swing off the tongue very nicely if pronounced out loud:

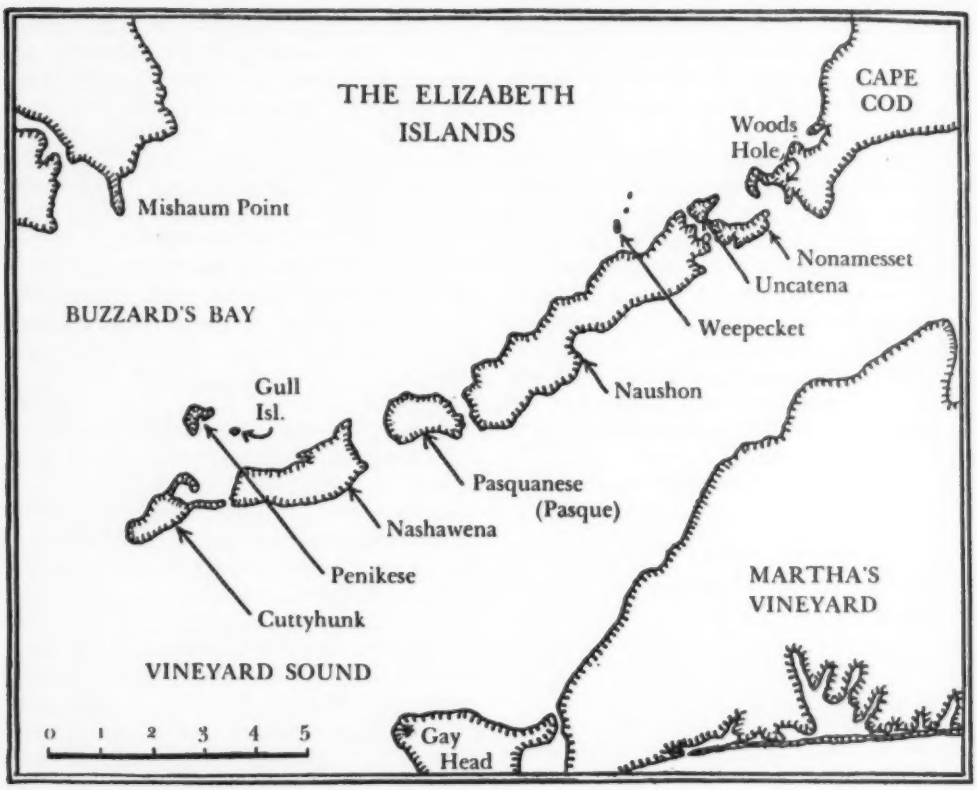
> Cuttyhunk, Penikese,
> Nashawena, Pasquanese,
> Naushon, Weepecket,
> Uncatena and Nonamesset.

Excepting the intrusive conjunction in the last line, this version was exactly as handed down through three generations of Browns. It provides in sequence a logical west-east progression, smoothly ticking off the islands as encountered, Pasque becoming Pasquanese (its original name was Pasachaneset) to help the rhyme.

However, apparently other residents of the area likewise had versions of the jingle handed down with honor in their families. And they were quick to speak up to defend the memories of what their revered forebears had taught them. My first communication came from Mr. C. Bradford Mitchell, a Fairhaven man regrettably transplanted to Washington. This was a fighting matter said he and supplied the following as proof of his contention:

> Cuttyhunk, Penikese,
> Nashawena, Pasquenese,
> Naushon, Nonamesset,
> Uncatena, Weepecket.

This garbles the geography, but my withering reply took, I will admit, an unfair advantage. He, poor soul, had already confessed to learning the rhyme in 1913 and although said to have come from no less an authority than a Clerk of the Supreme Judicial Court of Massachusetts in the 1890's, his Honor's name escaped him for the moment and my 1882-1883 source sent him off to dig through old family memoirs. Unless he could produce in writing his or somebody's grandparent, the field was obviously mine, for by all the rules of civilized warfare he could not bring himself to snipe at the integrity of the late Mrs.



Brown. Having easily won the first round, I relaxed into an unfounded sense of security. This did not last long. For, with only minor variations, I soon discovered that the Mitchell order of the islands was upheld by Amelia Forbes (Mrs. Raymond) Emerson, whose scholarly book, *Early History of Naushon Island*,[2] presents the following version as handed down in the Forbes family, long denizens of Naushon:

> Cuttyhunk, Pennikese,
> Nashawena, Pasquenese,
> Great Naushon, Nonamesset,
> Unkatena and Weepecket.

Where the 'great' came from is not explained, but I cannot feel that it is proper.

[2] (Boston, Privately Printed, 1935), p. 56.

My next correspondent was Mr. Heyliger de Windt of Boston, erstwhile summer visitor to Marion, Massachusetts. He also was taught the verse 'many years ago.' It went, said he:

> Naushon, Nonamesset,
> Cuttyhunk and Penikese,
> Nashawena, Pasquenese,
> Uncatena and the Weepeckets.

This version brings out the interesting but irrelevant point that actually there are three Weepeckets: Weepecket, Little Weepecket, and Weepecket Rock. But it does not take into account the existence of Gull Island, which lies between Penikese and Nashawena. Unfortunately this islet never rates mention in any of the poem's variations, but it is just as deserving as, say, Little Weepecket.

Since Mr. de Windt's verse apparently is lacking both in rhythm and geographical order, both Mr. Mitchell and I have summarily rejected it.

The Mitchell version, but with Uncatena spelled archaically, was to receive further confirmation from Mr. Freeman R. Hathaway, an erstwhile Cuttyhunker, who stated that he had been weaned on the following, and produced an issue of the New Bedford *Mercury* of 12 October 1897 to prove he had been brought up correctly:

> Cuttyhunk, Penikese,
> Nashawena, Pasquanese,
> Naushon, Nonamesset,
> Onkatonka and Weepecket.

But Mr. Mitchell himself supplied further confusion by the discovery (which he regretted) of still another presentation in the 1889 substantial volume by Zephaniah Pease and George Hough entitled *New Bedford, Massachusetts: Its History. . . .*[3] To wit:

> Nashawena, Pesquinese,
> Cuttyhunk and Penekese,
> Naushon, Nonamesset,
> Onkatouka and Wepecket.

This rolled back a few more years, but the geography was worse and furthermore my grandmother still had the edge by reason of printing the Brown version at least six or seven years earlier. At this point the reader might well feel that all possible combinations of the eight major island names had been exhausted and to hell with it. Not so. At the end it pains me to report that my grandmother must bow to the authority of still earlier printed versions, both agreeing. In the March 1881 issue of *Scribner's Monthly*[4] Francis Endicott came out with:

> Naushon, Nonamesset,
> Uncatema and Wepecket,
> Nashawena, Pasquinese,
> Cuttyhunk and Penikese.

Mr. Endicott evidently derived his version from still an earlier tome on New Bedford and its environs published by Daniel Ricketson in 1858.[5] Even this author admitted to being a newcomer in the field, stating that, 'the following manner of rhyming the names of the Elizabeth Islands has been handed down for several generations':

> Naushon, Nonamesset,
> Onkatonka and Wepecket;
> Nashawena, Pesquinese,
> Cuttyhunk and Penequese.

Those who have not become frantic are invited to consult the appended map of the Elizabeth Islands and select or make up any version of the rhyme that takes their fancy. I am reasonably sure that a 'correct' one does not exist, and if it does, I am also sure that I do not want to hear it. As for the original authorship, for all I care it can well be assigned to Wamsutta, Sachem of the Wampanoags. I hope he enjoyed it.

ALEXANDER CROSBY BROWN

[3] (New Bedford, Mercury Publishing Company, 1889), p. 129.

[4] Francis Endicott, 'Striped Bass,' XXI, 698.

[5] Daniel Ricketson, *The History of New Bedford, Bristol County, Massachusetts* . . . (New Bedford, 1858), p. 378.

Book Reviews

HOWARD I. CHAPELLE, *The History of the American Sailing Navy; the Ships and Their Development* (New York: W. W. Norton & Company, 1949). 7¾" x 10¼", cloth. xxiii + 558 pages, 16 plates, 155 text figures, 32 folding plans. $10.00.

Unlike the conventional naval history, which is generally an account of campaigns, battles, and individual naval officers, this history is a study of ships, hull forms, and naval constructors, with emphasis on the features that are of concern to ship modellers. Starting well back in the Colonial period, Chapelle carries the story up to 1854, when the last all-sail major combatant types were produced. The sailing vessels taken over in the Civil War and the later storeships and training ships are not included.

Chapelle writes fluently and briskly, with a minimum of direct quotation from older texts and an entire lack of footnotes or references to sources. This style makes it difficult to disagree with his opinions and interpretations, although his criticisms of the administration of the Federal government at certain periods (not always those of a century ago) may at times resemble the reactions of a Dixiecrat contemplating the Fair Deal. One gathers the impression that the naval constructors, were they unhampered by bureaucratic civilians or by line officers seeking the privileges of their ranks, would never have designed an unsuitable vessel. Since the author is himself a practicing naval architect he is well qualified to judge, but at the same time one may wonder if he is entirely free of professional bias.

The real meat in the book, however, is not in the text but in the skilfully executed drawings that illustrate it. Discussing *Personnel and Ships' Data* for the Barbary Wars in THE AMERICAN NEPTUNE for July 1945, a reviewer urged the Navy Department to continue publication of its archive plans of vessels to as near the present as military security would permit. Such publication for the sailing vessels before 1855 has now been rendered superogatory, for Chapelle has gathered together here not only all available drawings in the naval archives (some of which, we learn, disappeared in the transfer from the Washington Navy Yard to The National Archives), but also drafts from the collection of the British Admiralty and from private sources. These have all been redrawn and refaired by the author, and much useful detail has been added.

The relevant plans from *The History of American Sailing Ships* thus have been incorporated in the new book, in most cases without significant change, although the frigate *Hancock* now has a beakhead bow and her cathead is modified; many of the plans published earlier in the Rhode Island *Mariner* have undergone greater evolution in the restoration of doubtful or missing features. In the present volume the dolphin strikers shown on the sail plans of *Randolph, Raleigh,* and *Confederacy* are doubtful reconstructions; the spar is not given in their spar lists, and the evidence for its use before 1790, or simultaneously with two spritsails, is meager. These same sail plans illustrate how risky it is to use rigging practice of the end of the cen-

tury as authority for the time of the Revolution, since two of the ships carry a lateen mizzen yard instead of a spanker gaff. The fore topmast stunsail yard suspended from the topgallant stunsail boom on the spar plan of the frigate *Philadelphia* is another dubious feature.

Although these redrawn plans are in most respects superior to the unevaluated originals, certain details of interest have been lost. Thus the shape and position of cant frames, which were indicated in many of the original drafts, are omitted, as are such clues to design practice as the projection of diagonals on the vertical profile. On the other hand, Chapelle has been able to resolve anachronisms in the plans of *Philadelphia* and *New York,* Plates VI and VII of *Personnel and Ships' Data,* which turn out to have been prepared from offsets long after the actual vessels were built.

Chapelle's views on Joshua Humphreys and the designing of the frigates of the Revolution were expressed in THE AMERICAN NEPTUNE last July. With regard to the *Constitution* and her sisters, he credits Humphreys with execution of the 'master draft,' after suggestions by Josiah Fox and others had modified a half-model cut by Humphreys. Concerning the alleged 'French influence' in these plans, Fox was English, trained in an Admiralty dockyard, and, as shown by surviving plans, the American frigates resembled contemporary French frigates only in their proportion of dimensions to gun power. As to *Constellation,* the plans show clearly that the existing vessel is of interest not as a relic of the eighteenth century, but as the last sailing man of war designed for the United States Navy, and that she should be claimed by Norfolk, not Baltimore.

Throughout the sail period, American naval constructors dabbled in merchant work on the side, and some interesting cycles of design resulted. For example, the earliest packet ships, 1820-1825, were 'frigate-built,' while by 1843 the sloops *Plymouth* and *Jamestown,* at least above water, resembled the Atlantic packets more than they did the earlier naval vessels. The smaller vessels and yard craft, such as water boats and powder sloops, were usually very similar to their merchant contemporaries. There was also a relationship between the later corvettes and the early clipper ships.

For few designs in this period were quantitative aids to judging the sharpness of a hull—block coefficient, waterplane coefficient, or coefficient of midship area—worked out; indeed a displacement tonnage is given for only one vessel, the brig *Truxton.* Missing also is any explanation of the methods of computing burden tonnage, although historians ignorant of naval architecture have struggled too long with conflicting American and British tonnage figures, and an authoritative exposition is long overdue.

The book is a handsome piece of workmanship, and although most of the plans have suffered a severe reduction from the original drawings, they are clear and legible. Misprints are few and minor: *Congress* was launched 15 August 1799 and *President* 10 April 1800, and the plan numbers on pages 464-466 have become scrambled. The index gives not only the usual text references, but also a complete register of all sailing vessels of the navy in the period covered, the gunboats excepted. There are several scale drawings of fittings, such as hammock nettings, ordnance, gun carriages, and ships' boats. Although little attention is paid in the text to tim-

ber and scantlings, full specifications for *Warren* and *Falmouth,* 1825-1827, in an appendix help make up for the omission.

The publishers have made reproductions of all the plans at the scale of 1/48, and offer them for sale separately. A complete set costs a total of $924.50, which makes the book at ten dollars a real bargain.

JOHN LYMAN

SAMUEL ELIOT MORISON, *Coral Sea, Midway and Submarine Actions, May 1942-August 1942* (Boston: Little, Brown and Company, 1949). 5¾" x 8½", cloth. xxiv + 307 pages, 30 plates and 18 charts. Volume IV of *History of United States Naval Operations in World War II.* $6.00.

SAMUEL ELIOT MORISON, *The Struggle for Guadalcanal, August 1942-February 1943* (Boston: Little, Brown and Company, 1949). 5¾" x 8½", cloth. xii + 375 pages, 30 plates and 35 charts. Volume V of *History of United States Naval Operations in World War II.* $6.00.

Captain Morison's latest volumes in the *History of United States Naval Operations in World War II* were appropriately published within a few months of each other, for together they form a consecutive history of the period from May 1942, when the United States Navy, after months of adversity, won an important strategic victory in the Coral Sea, to February 1943 when, after many months of relentless struggle by land and by sea, the last Japanese defenders of Guadalcanal, somewhat to the surprise of their opponents, evacuated the island. This is the period of the war that is most confusing to the average American. The newspaper reports at the time were both incomplete and over-enthusiastic. Fighting was going on, but few people outside the armed forces knew exactly where or why. During these months the United States Navy passed from the first, defensive stage of the war through the defensive-offensive phase of Midway, to the offensive-defensive which was marked by the landings in the Solomon Islands on 7 August 1942. Volume IV describes these events and places the United States forces ashore at Guadalcanal and Tulagi. Volume V untangles with remarkable clarity the great series of bloody actions which, during a period of six months, marked the struggle for this strategically important but otherwise useless and revolting island in the South Pacific. At Midway, for the first time, the equilibrium of the Japanese Navy was upset. It was extremely important that that equilibrium should not be regained. Admiral King's decision to seize the Solomon Islands, which Captain Morison appropriately terms 'one of the great decisions of the war,' was designed to prevent Japanese interference with the lifeline of shipping between the United States and Australia. The operation literally involved making something out of nothing, as the majority of United States forces were committed to Europe and the North African landings. The defense of the island led to far more severe action than its seizure. Captain Morison tells what happened on shore as well as at sea, for the Guadalcanal campaign involved sea power, ground power and air power in intricate combination. Here for the first time is a lucid narrative of these months. Here, too, is the first intelligible account of the Battle of Midway, including a well-deserved tribute to the high qualities displayed by Admiral Spruance in that action.

A review of Volume III of the *History of United States Naval Operations in World War II,* published a year ago, stated that 'Thus far each volume seems, if possible, better than the last.' This feeling is amply confirmed by Volumes IV and V, which indicate that Captain Morison is in his full stride.

ROBERT CUSHMAN MURPHY, *Logbook for Grace, Whaling Brig* Daisy, *1912-1913* (New York: The Macmillan Company, 1947). xiv + 290 pages. Cloth. $4.00.

In the summer of 1912 Robert Cushman Murphy, then a young naturalist recently graduated from Brown University, joined the whaling brig *Daisy* of New Bedford, E. D. Cleveland, master, at Barbados, for a voyage to the Antarctic. Purely as a record of New England whaling in the twentieth century the book would be of interest, but its author's character and literary style make it of double value. Robert Murphy was not going whaling for a lark. He was bound for New Georgia on serious scientific business on behalf of the American Museum of Natural History, and the brig *Daisy* was the best means of getting there. Consequently he was equipped with considerable quantities of scientific apparatus and a small but respectable library which included, in addition to the useful works on zoölogy, Dante, Bunyan, Horace, Shakespeare and the New Testament, all of which he read to good purpose. He had been married only four months ago, and was setting out upon this expedition with the blessing and enthusiastic consent of his bride. It is not to be wondered at that during the long days at sea he recorded for her benefit all the details of the new life which was before his eyes, the routine of whaling, and his own collecting activities ashore in New Georgia.

The scientific results of this voyage have long since been published in numerous articles in learned journals, and in the author's substantial *Oceanic Birds of South America.* Thirty-five years after the end of the voyage, however, this personal log, sent back to Mrs. Murphy by any strange means of communication that might be available in the South Atlantic, has been revised and published, with completely delightful results. *Logbook for Grace* is a fine documentary record of the last days of New Bedford whaling and sealing, but it is also an agreeable self-portrait of a sincere and delightful young man engaged on serious business. It would be hard to find a better evening's reading, and it is highly, although somewhat belatedly, recommended to all readers of THE AMERICAN NEPTUNE who have not already discovered it for themselves.

Mississippi Panorama (St. Louis: City Art Museum, 1949). 6¾″ x 9¾″, paper. 227 pages, 174 illustrations in monochrome, 5 color plates. $3.25.

BENJAMIN F. KLEIN AND ELEANOR KLEIN (Editors), *The Ohio River Handbook* (Cincinnati: Young and Klein, 1949). 5½″ x 8″, paper. 240 pages, numerous illustrations and maps. $1.00.

These two publications, issued for quite different purposes, contrive to dove-tail nicely and complement each other to give an interesting and vital record of the Father of Waters and his two principal tributaries, the Missouri and Ohio. The first is a catalogue of an excellent loan exhibition of paintings, drawings, prints,

photographs, river boat models, and steamboat appurtenances which opened at St. Louis' City Art Museum in the fall of 1949. One unusual feature displayed was the once briefly famous Dickeson-Egan Mississippi panorama, a tempera painting on muslin sheeting, 7½ feet high by 348 feet in length. This *tour de force,* lent by the University of Pennsylvania Museum, is the sole survivor of over a half dozen panoramas known to have been made of the Mississippi. It was originally displayed behind an enframement or stage opening and was wound from one vertical roller to another. In 1852 Dr. Dickeson's cash customers plunked down two bits to see it all over the United States. Mr. Perry T. Rathbone, director of the City Art Museum, attributes its preservation to the 'paradoxical good fortune of neglect.'

For the most part, however, the paintings in the exhibition were selected for artistic rather than purely historical reasons. George Caleb Bingham's masterful canvases of river boat life receive an honored place both in the show and in this catalogue. It is interesting to note that certain other paintings, 'considered essential to the exhibition,' are described and reproduced in the catalogue despite the fact that their owners would or could not lend them. Two essays, 'Character and History of the Mississippi,' by Charles van Ravenswaay and 'Art of the Mississippi,' by Mr. Rathbone, precede a scholarly annotated list of 347 items, a great part of which are also depicted.

Space limited the St. Louis exhibition to the Mississippi and Missouri Rivers. For the other principal tributary we may turn to *The Ohio River Handbook,* a well-illustrated little volume containing unpretentious random notes and comment relating to the Ohio River and Cincinnati, its principal port. The last named is portrayed in a series of eight rare daguerreotypes which, joined together, form a panorama extending from the site of the present Roebling suspension bridge to East End Cincinnati. Taken by W. S. Porter in 1848, these views portray the waterfront with remarkable clarity and detail and are said to be the oldest known photographs of river steamboats. Other prints successively trace the development of the river boats down to the present giant pushers.

One useful feature of this work is that it might serve to introduce to deepwater sailors the redoubtable Zadok Cramer and his famous *Navigator,* the first dependable guide for travel on the hitherto incompletely charted Ohio River, of which a few facsimile pages from the 1808 edition are reproduced in facsimile. Another section brings deserved attention to the work in channel improvement, flood control, locks, dams, and other useful but not sufficiently well-known functions of the United States Army Engineers. A glossary of steamboat terms at the end of the book was taken from Captain Frederick Way, Jr., *Pilotin' Comes Natural.*

Although the scope of THE AMERICAN NEPTUNE is in no way limited, most of its readers confine themselves to salt water. But it is good once in a while to sail up the rivers into fresh water. This not only affords a change of scene, but causes barnacles to drop off. Both publications are recommended.